HSBC Global Research

4 August 2020

Asia Demographics

Large shifts are coming soon

Equity Strategy
Asia

- Tectonic shifts ahead in the next decade; India's population should grow bigger than China, while China's is set to shrink
- Meanwhile, Asians are living longer, residing in smaller households, flocking to mid-tier cities, and saving more
- We identify some big picture implications: empty-nesters trading up, a female future, and rising spending on health

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We build on our previous research on Asia's demographics with a new series. This report focuses on long-term investment themes shaped by demographics, while in the accompanying notes we work with fundamental analysts to highlight stock opportunities, starting with the consumer sector: Asia Demographics – Tectonic shifts ahead for the consumer sector, 4 August 2020.

Big changes are not only around the corner... Before the end of this decade, India is expected to surpass China as the world's most populous country, which should swiftly be followed by China's population declining. Markets will start to consider the implications well before this happens. For instance, companies need to position themselves for slower volume growth, and instead work on their ability to raise prices – possibly by offering better quality products.

…they are also happening now: Asians are getting older, living longer, and flocking to mid-tier cities. They're also residing in smaller households while women are having fewer children and working more. All this impacts consumer spending. While COVID-19 continues to cast a shadow over the region's economy, it is also accelerating some long-term trends that were already underway like more online shopping.

An academic view: We also interviewed Dr. Stuart Gietel-Basten, Professor of Social Science and Public Policy at HKUST. He stated that it is possible for very low fertility rates to become more common in the region. Further, he suggested that it would be prudent to start planning for a time when families in Asia are not able or willing to care for their older members, and to start thinking about new types of insurance, care, and financial products to deal with this.

Opportunities: (1) We expect Chinese 'empty-nesters' to buy more premium products – better quality at higher prices – on almost everything from food and clothing to home furnishings. **(2)** More women in the workforce, which contributes to higher household income and how it is spent. **(3)** New forms of urbanisation are unfolding too with growth higher in mid-tier cities, especially in ASEAN and India. **(4)** Increased health awareness and rising risks from some diseases, particularly diabetes, mean more business for pharmaceutical companies, hospitals, and sellers of health equipment. **(5)** Asians are living and working longer, which allows for a greater accumulation of wealth to finance an extended period of retirement.

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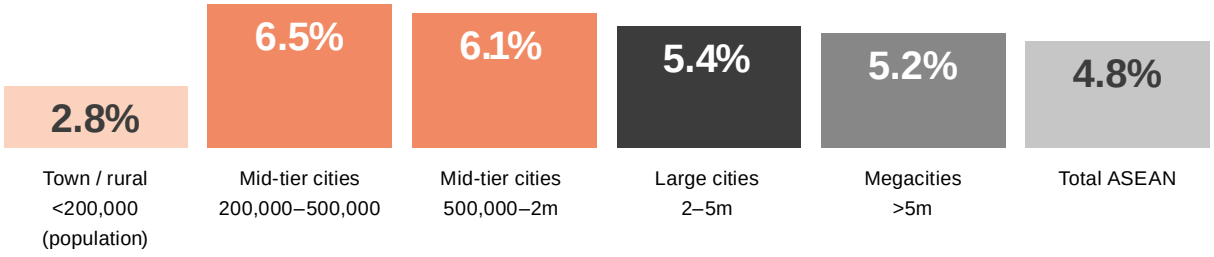
Asia demographic snapshot

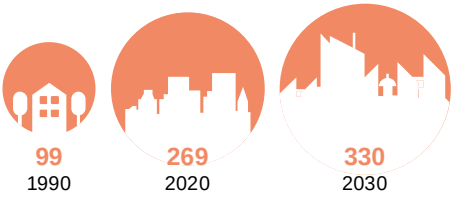
Asians continue to flock to urban centres

Urbanisation has a significant impact on how people live, if they get married, what education they receive, and if they can find a job. Smaller urban cities will grow faster than the region's larger cities

Compound annual growth rate of GDP (2013–30) in ASEAN



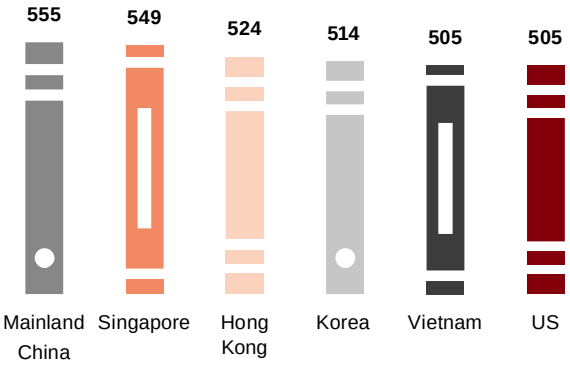
Number of mid-tier cities (population of 1-5m) in Asia will increase by 233% (1990–2030)



18% of urban population lives in Asia's mid-tier cities (2020)

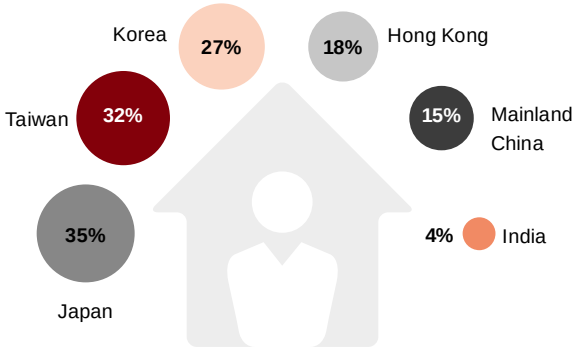
Education

Mainland Chinese students score well in reading tests, as do those in Singapore and Hong Kong with Vietnam's score on a similar level with the US (mean PISA score)



Smaller households and China's 'empty-nesters'

Fertility rates are falling, as are the number of marriages – lowering the average size of households and impacting saving and spending across Asia (single-person households, as a % total)



Demographic shifts driving these investment themes

- The Chinese 'empty-nester' – the biggest demographic change globally
- Asset accumulation is a growth industry across the region
- More women in Asia are working and increasing household income
- Diabetes is a theme – c42% of diabetics in the world are in India or China
- There is more growth in mid-tier cities across Asia than in mega cities

Source: McKinsey Global Institute Cityscape database, PISA 2018 Database, PISA at the OECD, Ministry of Education and Training (Vietnam), UN Household Size and Composition Around the World 2017, World Urbanization Prospectus 2018, United Nations, HSBC
PISA is the OECD's Programme for International Student Assessment.

Facts and figures

2024

When the population of India is expected to exceed China

50%

of luxury purchases to be done at home in China by 2025e

USD108trn

size of pension assets in Asia (ex-Japan) by 2050e

1.16bn

visits to traditional Chinese medicine hospitals in 2019

330

Mid-tier cities in Asia by 2030e, up from 99 in 1990

42%

of diabetic patients in the world come from China and India

33%

Proportion of single-person households in Korea by 2030e

100m

Number of women who found a job in Asia between 2000 and 2017

Japan is already “super-aged” with Singapore, Hong Kong, Taiwan, and Korea on course to join it by 2030

32%

of Koreans aged over 65 are still employed

Top of the class

Vietnam achieves the same scores as US students in international PISA exams

Source: HSBC

The big picture

1. **Tectonic shifts between Asia's two biggest countries:** Before the close of this decade, India's population is expected to exceed China's, while China's population will start shrinking. That means companies can't just rely on volume growth anymore. See page 32.
2. **Look at Japan**. Falling population growth does not necessarily mean the labour force will shrink. Even though Japan's population is falling, the labour force has been growing since 2013. And as people work longer, they accumulate more wealth. See page 45.
3. **Rise of the Chinese 'empty-nesters'.** The combination of an ageing population, children leaving home, and rising numbers of working women, is a powerful force in China. These 'empty-nesters' are one of the largest demographic shifts unfolding in the world. They buy high-quality goods and are willing to pay higher prices. See page 10.
4. **Focus on shrinking household sizes**. The number of single-person households is estimated to rise to 32.7% by 2030e in Korea. This changes spending patterns – more discretionary consumption and ready-to-eat meals – leading to rapid growth in convenience stores. Expect similar trends in Taiwan and parts of mainland China. See page 14.
5. **Women to the fore.** More women in Asia are working, especially in China and Indonesia where more are completing higher education and getting managerial jobs. This boosts household income and impacts how families spend their income. See page 13.
6. **Don't miss mid-tier cities.** There's growing employment and spending in mid-tier cities, especially in India and ASEAN. This has created a new group of consumers in lesser-known cities and towns across Asia. For investors, assessing a company's geographical footprint becomes increasingly important. See page 16.
7. **As people shift online**. Southeast Asia's internet economy is expected to triple to USD300bn by FY25e. Companies are now beginning to reorient their businesses as more customers order online for the first time. ASEAN and India in particular should see rapid increases in online penetration. COVID-19 will only accelerate this trend. See page 17.
8. **Traditional medicine is gaining traction.** Rising interest in health is renewing interest in traditional products. Exports of traditional Chinese medicine rose 270% over the past 10 years. Indonesia and India's traditional healthcare industries are booming too. See page 25.
9. **Bicycles are fashionable, again.** With people choosing healthier lifestyle and keen to avoid public transport due to COVID-19, demand for bicycles is rising. Asia has some of the best bicycle designers and bicycle component makers, especially in Taiwan. See page 24.
10. **Diabetes is a key healthcare threat.** While the focus is currently on COVID-19, more than 70% of the world's population succumbs to non-communicable diseases like cancer and diabetes. Associated risks are high in the Philippines, Indonesia, and India. Healthcare and consumer companies need to develop products to deal with these diseases. See page 24.
11. **Asset accumulation is significant in Asia.** Asians work longer and accumulate more assets. We expect Asia's asset management industry, on average, to grow 5% until 2050e. Asset management in Asia is a growth industry. See page 27.

Executive summary

- Asia's demographics aren't 'bad', just complex; people are living and working longer, especially women, and education is changing
- Demographics are especially important for portfolio construction…
- …as they drive key investment themes like a rise in 'empty-nesters', 'a female future', growth in mid-tier cities, acceleration in asset accumulation, and increased spending on health and wellness.

Why demographics matter for portfolio construction

In this report, we focus on long-term investment themes shaped by demographics…

This is the first in a series of reports where we update our previous work on demographics.

If you're looking for investment ideas for the next month or so, this report will not help you. But it will help you if you want to start thinking about how to prepare for some of the major demographic shifts that lie ahead. If you want to understand what 'makes Asia tick' and the long-term drivers that will dominate the region for the first half of this century – this report will be key. We also highlight long-term investment themes that will benefit from all this.

We have been repeatedly told that 'Asian demographics look terrible' or that 'a demographic time bomb is ticking' given low fertility rates[1] and an ageing population. However, we believe that's the wrong way to look at it. Demographics are similar to the weather – there is little you can do to stop it and there is no 'good' or 'bad' weather. A farmer will love the rain, a sunbather won't. You can complain about it, but rain will fall. Instead, it's all about being prepared and having an umbrella at hand, or sunscreen if it shines. Or, in investment terms, highlight trends and prepare for them.

…building on our previous research and also looking at what's new or changed

We have done extensive research on demographics in the past (see *Asia Demographics: And how to make money from it*, 23 April 2019) and this report builds on that analysis. While demographics don't really change much, COVID-19 has accelerated some of the long-term themes with some themes becoming a lot more visible. This includes more domestic travel, mid-tier cities emerging, and rising demand for digitalisation. Clearly, this matters for businesses and investment managers looking for new opportunities. However, this report is different, as mentioned above, it is not about highlighting stocks for the next quarter, but more about diving into themes that will dominate Asian-focused portfolios for decades to come and how they vary across countries.

This report is divided into two sections: in the first part we look at five investment themes unfolding in Asia and in the second, we recap what the major demographic changes are.

1 Fertility rate measures the average number of children per woman. The birth rate measures the number of children per population.

Five investment themes

We delve into investment themes that we believe will benefit from these demographic shifts. We group these trends into five investment themes:

- '**Empty-nesters' trading up**. They spend more on travel and are willing to pay for quality products. Premiumisation and companies moving up the value-added ladder can benefit.
- **More women working** means rising household incomes and demand for quality products. Working women have more say in what they buy for themselves and for the family.
- **As people flock to medium-sized cities**, more so than mega cities, that's where companies should look for growth. We believe this is especially true in India and Indonesia.
- **Rising incomes are increasingly being spent on health and wellness**, with COVID-19 accelerating this process. Part of this is likely to flow through to traditional medicine, which continues to be appealing in parts of Asia such as China, India, and Indonesia.
- **Working longer means more asset accumulation**, which needs to be invested, and, as such, we continue to see rising growth in the Asian asset management industry.

Five demographics shifts

Our investment themes are based on underlying demographic shifts reshaping Asia. Many of these themes are 'slow burners' and some are hard to see, but they are undoubtedly playing out:

- There's a rise in the number of households where grown-up children have left and parents find themselves in a comfortable financial position. These 'empty-nesters' are the largest, fastest-growing consumer market globally. The number of Chinese households earning more than USD50,000 per year is expected to be over 64m by 2030e, growing at a CAGR of 15.5% since 2010.
- More women are working, marrying late, and having fewer children. Hence, households are getting smaller, which changes the way they consume. A single-person household spends more on ready-made meals and outside entertainment than a four-person family.
- Asians continue to move from villages to cities and this means growth in urban centres; however, it is mid-tier cities that are growing faster than mega cities, especially in ASEAN.
- Asians are ageing. 15% of the Asian population to celebrate their 40th birthday in the next 10 years, post which the expenditure of health generally increases.
- People are living longer and working longer. This means that they accumulate more assets over their working life.

While demographics don't really change much from one year to another, COVID-19 has accelerated some of the long-term themes and some other trends are becoming more visible. The internet economy has become more important than ever. In Korea and Taiwan, single-person households are rising leading to faster growth in convenience stores compared to other formats like hypermarkets and supermarkets. But in India, urbanisation is increasing the contribution of modern or organised trade in the retail industry

How this impacts investments in equities is discussed in a separate series, of which the first one on Consumers is here: *Asia Demographics – Tectonic shifts ahead for the consumer sector*, 4 August 2020.

We also have a short interview with Dr. Stuart Gietel-Basten, Professor of Social Science and Public Policy at the Hong Kong University of Science and Technology.

Box 1. An academia view on Asia demographics : interview with Dr. Stuart Gietel-Basten, Professor of Social Science and Public Policy at the Hong Kong University of Science and Technology

Q1. Are demographic forecasts accurate, such as those made by the UN Population department?

Relatively near-term forecasts of total population and age structures have been generally pretty accurate. Longer-term projections from the past much less so and this is likely to be the case as we go into the future. But, this differs by country. I can be almost >95% sure of the number of 60-year olds in Japan in 2022, because we know the number of 58-year olds today, and know roughly their (low) mortality rates, and there is little immigration. If we assume these hold for the next two years then we have our forecast. But if we say in 2050, or 2100 for Japan, then of course our uncertainty is very high. Similarly, when [demographic] transitions are still mid-flow (such as big improvements in life expectancy and major fluctuations in migration, it is almost impossible to be confident in projections, even a short-term one).

Assumptions always underpin forecasts. Sometimes the assumptions are way off. We didn't foresee the exponential increases in longevity. We didn't foresee fertility rates falling as low as it has done. We can only really base our statistical and/or expert judgements on *experience*. As new issues come to the forefront, we can only catch up and adapt to them.

Q2. Why are fertility rates falling?

It depends where we are talking about. In much of Southeast and South Asia, this is due to urbanisation, increased investment in education, industrialisation, acceptance of family planning, and changing attitudes towards family sizes and so on. I suppose the more pertinent question is why is fertility rates so low in some places, and will these other settings in South and Southeast Asia converge on such low fertility rates. In many ways, the answer is right in front of us. You do not need to be a professional demographer to recognise the challenges of getting started in life, finding a partner and starting a family anywhere – let alone urban Asia. Whether it is the direct or the indirect costs, or the burden of responsibility for the household and parents (in-law), the social costs to other consumption aspirations; the reasons for foregoing or limiting childcare are pretty clear. Without changes to the context of weak state systems to support families and what seems to be a relentlessly unforgiving work culture, it is hard to see any major change ahead. Under these circumstances, it is not impossible to envisage very low fertility rates becoming a more common feature in the region.

Q3. Asia is ageing. Is this a worry and are we prepared for it?

In many ways much of Asia is better prepared for ageing because we do not have the well-developed financial system of Europe and North America in most places. Having said that, if I were in charge of the Japanese or South Korean welfare system, I would be really worried. A lot of painful adjustments will need to be made to keep these systems going. Furthermore, we still have a lot of 'unrealised potential' for growth, in terms of both economic and human capital development, which can offset some of the potentially negative effects of ageing.

Having said that, we are absolutely not prepared for the tremendous growth in long term care, which will be needed – especially as dementia becomes an increasing feature of our health landscape. We are not prepared for the needs of income protection for all in later life. Our cities and communities are not designed in such a way as to foster active ageing and mobility. We are not prepared for the potential shift in the democratic landscape towards older voters, which may further undermine the prospects of the young. In other words, we have worries – but not quite the ones which might appear at first sight.

Q4. What can we do to better prepare for these challenges?

Well, it is probably easier to say what we should not do rather than what we should. We should not seek a 'demographic solution' to this problem by cajoling women into having more children. We should not bring in big European style pension systems, which will be politically very desirable but unsustainable in the near future. We should not cynically play the older population off against younger people for political gain (as this may just have a feedback effect).

However, there are a few things we should be doing. As a few examples, we should start planning for a time when families may not be either able or willing to care for their older members, and start thinking about new types of insurance, care, and financial products to deal with this. We should ensure that every worker has the opportunity to meet their full potential for as long as they feel able to do so. We should be working to ensure that populations age with the best health possible. We should recognise that migration will play a role in offsetting some of the challenges of ageing, particularly in certain sectors such as care as well as 'retirement migration' and try to adapt systems to accommodate this.

Sources: HSBC

Investment themes

‘Empty-nesters’ and trading up

- The rapid growth of Chinese ‘empty-nesters’ is one of the most important consumer trends across the region…
- …driving everything from premiumisation in areas from beer to athleisure through to rising demand for customised furniture
- Many companies are exposed to these trends, including Korean major duty-free and Chinese furniture makers

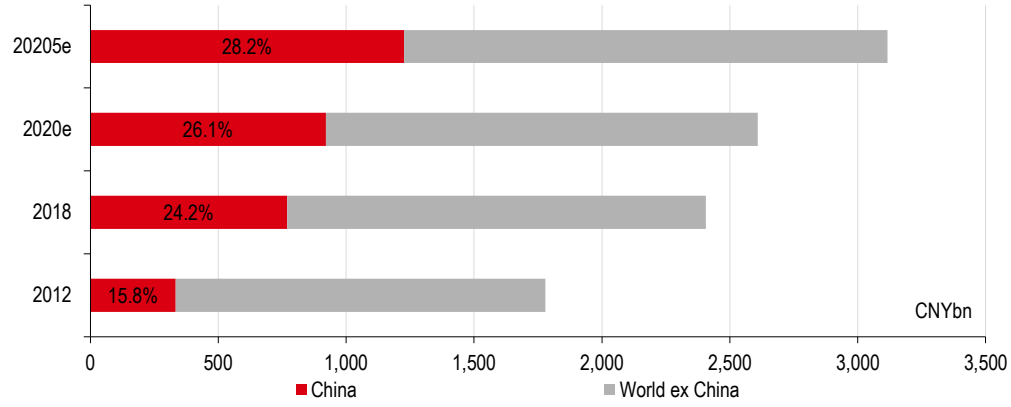
The power of premiumisation

See page 54 for a section on rising empty nesters

Spending patterns across Asia are changing significantly, partially driven by what’s happening in Asian households. Household sizes are falling and the number of those that work is rising, in particular as women increasingly enter the workforce. That means more income for each household, with fewer people in it, leaving consumers better off and able to ‘trade up’ on items from beer to sports clothing. This is particularly the case in China, with the rise of ‘empty-nesters’ – couples with adult children residing elsewhere – who have money to spend.

According to data from Global Demographics, spending on clothing and footwear by affluent households[2] in China increased at a CAGR of 26.3% in 2007-17, reflecting an increase in both the number of affluent households as well as spending per household. In fact, Chinese already contribute more than a quarter to the world’s spending on luxury items, according to McKinsey. However, that’s expected to rise even higher between 2020e and 2025e as more than c65% of additional luxury spending in the world is expected to come from China.

Exhibit 1. Chinese consumers contribute more than a quarter to global luxury spending



Note: China here refers to mainland China.
Source: McKinsey China Luxury Report 2019 estimates, HSBC

2 Households with an annual income above USD125,000 in real 2017 terms and using the same years’ average FX rate.

The trend of trading up is visible in many areas:

- **Premium beer** – According to GlobalData, Asia's beer industry is estimated to grow at a tepid 1.6% by volume and 4.9% by value in 2018-23e. However, it's the premium and super premium categories that are likely to lead the growth, and where the story is, with a CAGR of 5.6% and 8.5% in volume and value terms, respectively. We believe that by the end of 2023e the premium and super premium beer segments in Asia may eventually grow as large as mainstream beer (in terms of value), with premium and super premium contributing 45% of value, up from 38% in 2018 (see *Asia Consumer & Retail – 2020 Vision: Are consumers still thirsty for premiumisation?*, 23 January 2020).

  Among Asian economies, mainland China is the largest market both in terms of volume and value, and its growth in value is still robust despite the slowdown in overall volume. South Korea is a significant consumer of alcoholic drinks, and the premium and super premium beer categories continue to grow at a fast pace there. India and Vietnam are developing markets with significant growth in both volume and value.

- **Athleisure** – According to Euromonitor, sportswear is growing rapidly, accounting for 24% of the global apparel market in 2019. However, it's not just the increase in exercise that is boosting the space, it is also a preference for "athleisure" and a general trend towards casualisation. Indeed, while McKinsey estimates that apparel overall is expected to see a decline due to shifting consumer preferences, sportswear is expected to see the highest category growth rate in 2020e at 6-7%[3] (*Sporting Goods – Higher, faster, stronger*, February 2020). There is a new emerging category too – "athluxury" – which revolves around luxury athletic wear.

- **Home improvement –** Chinese 'empty-nesters' are also spending more on home comforts, from kitchen appliances to home furnishings. In particular, the way people buy furniture in China is changing fast. Custom-made furniture now accounts for around 30% of the country's overall furniture market, and is growing rapidly. Growth in this relatively new market is likely to be rapid, especially as home comforts come high on the list for lifestyle priorities by demographic groups, including 'empty nesters'. This also creates a market for upholstered furniture, which covers a number of product categories, including sofas, beds, mattresses, bedside tables, and coffee tables. Unlike the traditional wood furniture, this category focuses on style and comfort. As a result, upholstered furniture manufacturers are likely to step up investments in branding, customised design, and environmental protection. This may drive the product mix to mid- to high-end products, boosting unit prices (*China Custom Furniture: Initiate coverage: New floor plans – the rise of China's custommade furniture industry*, 31 May 2018).

Back to home

After years of buying luxury goods abroad, Chinese consumers are starting to buy at home

Another trend is unfolding in Asia, and especially in China. A few years ago, 75% of luxury purchases by Chinese happened outside of mainland China. However, now, Chinese consumers are tending to shop more at home and travel more domestically, and this trend is expected to become even stronger in the post COVID-19 world. Local spending grew twice as much as spending abroad in 2018, and Bain & Company estimates that Chinese consumers will make 50% of their luxury purchases at home in China by 2025e.

Duty-free outlets top the list of preferred points of sale for wealthy Chinese consumers when overseas, according to the McKinsey China Luxury Report 2019. However, duty-free stores could, ironically, also benefit for the simple reason that they don't just cater anymore to travelers buying luxury goods abroad but also to domestic travelers.

3 McKinsey & Company (2020). "The state of fashion 2020."

Since most of their luxury purchases occur abroad, China's government is trying to lure this consumption back home by enlarging the domestic duty-free (DFS) market. A number of measures have been announced, including an increase in offshore duty-free allowances at Hainan Island to support the domestic DFS market. This is also a big theme in Korea. Duty-free sales in Korea are typically driven by daigous (Chinese buyers who purchase items abroad for re-sale at home at a discount), especially since 2017.

Going indigenous

Chinese consumers are shifting from 'ostentatious' logos to niche brands and bespoke products

When it comes to the designer brand industry, Chinese consumers are shifting from 'ostentatious' logos to niche brands and bespoke products. Moreover, the improving quality, design, and brand power of domestic brands have drawn increasing attention from Chinese consumers. The successful debuts of Chinese fashion brands Li-Ning and Peace Bird at the New York Fashion Week in February 2018 suggests that designs incorporating traditional Chinese elements are coming into the fashion limelight.

Impact across countries and sectors

Korea

We believe Korean major duty-free operators fit into this theme as more than 70% of the sales come from Chinese. Although the travel is restricted these days, once the pandemic situation improves, albeit it is taking longer than we initially expected, we think Korea may become one of the key destinations for Chinese tourists once again.

On 1 July the Korea Tourism Organization and China's C-Trip jointly promoted Korean hotel presale discounts to Chinese consumers via a WeChat Super BOSS Live Show. C-Trip co-founder, James Liang, appeared wearing a 'Hanbok', a traditional Korean dress, and spoke about Korea. This raised market hopes for the lifting of the ban on Chinese group tours to Korea.

More than two million people watched the show that started with the promotion of Hotel Shilla and some products were sold out during the show (source: Hankyung, 30 June 2020). Although the Korea Tourism Organization said it wasn't an official lifting of China's ban on group tours, we believe that Korea will regain its ranking as the main destination for Chinese travellers once the pandemic is over.

Elsewhere, demand for furnishings and products related to renovating houses continues to rise in Korea as people: (1) stay at home to be safe amid the pandemic, (2) spend more on furnishings as they earn more, and (3) tightened regulations over rebuilding old apartments has limited a pick-up in apartment transactions, but has increased demand for remodelling

China

We mentioned above that we expect sports participation to rise in China, and benefit domestic sportswear brands. As Chinese consumers get wealthier, not only will they spend more on buying better quality goods, they will also spend more on getting better experiences too. We believe hotel operators benefit from this.

We also expect spending on health and wellness to benefit the growth of premium personal care & hygiene products.

Consumer upgrades represent a powerful retail trend in many sectors in China, and furniture is no exception to the upgrade story. Growth in this relatively new market is likely to be rapid, especially as home comforts come high on the list of lifestyle priorities for consumers, especially 'empty nesters'. Additionally, the renovation rate of existing housing continues to rise, particularly in first- and second-tier cities.

In our view, there is growth potential in the domestic armchair recliner market, given the far lower penetration rate of recliners in China (13%) relative to the US (41%). We expect this figure to rise as Chinese families move up the premiumisation ladder. Moreover, with COVID-19, as people spend more time indoors, recliners are comfortable and not as expensive as before.

The future is female

- More women in Asia are working and more are contributing to household income…
- …with the result that they are the decision makers for three out of four purchases across the region
- Many companies are exposed to this trend, including department stores and cosmetic companies

Female spending

See page 49 for a section on "Fewer children, smaller households" and page 46 for "Women @ work"

In Asia, women are increasingly marrying late and many decide not to marry at all. This has, over time, shrunk the average size of households. Women are also increasingly working, having a greater say in household spending decisions, and spending more on themselves. Clearly, women are becoming very relevant and important consumers. Three out of four purchases in mainland China are done by women (Frost and Sullivan).

> **"Three out of four purchases in mainland China are done by women.**

It is therefore 'quite odd' that investors don't consider female shopping as a distinctive theme; however, many companies do. From fashion to fitness to healthcare and family care, companies are tailoring their products and services to meet the emerging or changing demand of women. This is likely to only grow in importance with rising female income as more women enter the workforce.

There are areas connected to the rise of female consumers.

- Take the example of **aesthetic medical services**, which is growing quickly. Mainland China's aesthetic medical services market expanded at a CAGR of 24% in 2013-17 and is likely to remain at this pace (c25%) through 2022e, according to Frost and Sullivan. Market penetration has improved slightly from only 12 aesthetic medical treatments conducted among every 1,000 people in mainland China in 2017 to 15 treatments per 1,000 people in 2018; nonetheless, the figure remains low, especially when compared to 86 treatments per 1,000 people for South Korea and 52 treatments per 1,000 people for the US in 2018, according to Frost and Sullivan (see *Discovery Research - Initiate coverage: Tapping into China's female consumers*, February 2020).
- Another category is **cosmetics, beauty, and clothing**. In 2017, the average spend on make-up in mainland China was a mere USD3 per year, lower than the world average of USD8 per year and significantly lower than in Japan (USD45 per year) and Korea (USD30

per year)[4]. However, spending is catching up fast. Cosmetic retail sales in mainland China rose 13% y-o-y in 2019 and aesthetic medical services in mainland China climbed at a CAGR of 24% in 2013-17.

- **Exercising** at gyms is another example. According to GroupM, working women exercised in gyms on average eight times a month in the last quarter of 2018, up from 6.7 times in the two years prior. In addition, 31% of women who do over five hours of exercise a week plan to increase their spending on sports next year, compared to 29% for men, according to Accenture.
- With the increasing number of **single households**, the proportion of single households is increasing and driving demand for ready-to-eat or frozen foods. The market for bento (a single portion take-away meal) is growing in Japan. In Korea, the ready meals market is growing as the so-called "Home Meal Replacement" trend is gaining traction for both adults as well as children. Younger consumers also consider single-portion ready meal products as high quality and better value-for-money than purchasing individual food items to prepare at home. In addition, an improvement in the quality of chilled ready meals can help change consumers' perception that ready meals are not fresh.

Impact across countries

Korea

In Korea, the biggest trend over the decade has been the rise in the number of smaller households, especially single-person households. We think this is partly attributable to more women working, resulting in delays to getting married or even having a child. Inevitably this has been accompanied by a steep decline in the fertility rate with the population increasing during 2015-2020 by a mere 0.2% (vs. world average of 1.1%). Korea's fertility rate was 1.1 (vs. world average of 2.4), the lowest among OECD countries.

According to Statistics Korea, single-person households are estimated to account for 29.6% (and 58.5% if two-person households are included) of total households in 2020e, or almost a third. This seems to be a significant increase from 23.9% in 2010. Single-person households are estimated to rise to 32.7% (and 65.6% if two-person households are included) by 2030e. In addition, the percentage of the population aged between 0-14 accounts for 12.5% of the total population in Korea whereas the OECD average is 25.4%. Only Japan (12.4%) and Singapore (12.3%) are lower.

As a result, we are witnessing a trend where convenience store industry is growing faster than offline formats such as hypermarkets and supermarkets. The pandemic has led to a dramatic drop in the number of shoppers across various offline channels (vs. an acceleration in online shopping); however, we continue to like convenience store names as we expect a sequential improvement in sales (-2% level in 1H20 vs. 1-2% in 2H20e), which will be a key share price driver as fewer store openings should result in strong sales per store, in addition to the low base effect.

Furthermore, we believe Korean cosmetic companies will benefit from the trend of more women working, especially in China.

4 Euromonitor, 2017

China

According to the government's population survey in 2017, the average household is 3.03 people – 2.78 in wealthy regions, 3.10 in developing areas, and 3.31 in poorer parts of the country. Significantly, households with 1-2 people accounted for 77.1% of total households in developed regions. Not surprisingly, both marriage and birth rates were the lowest in the wealthier regions.

The smaller size of households and more women working means that fast food is often the most convenient choice. This is especially true in the big four cities where delivery services are readily available. Family sizes are likely to remain small, with more single households, which further supports the rise of fast food consumption. For example, many young couples prefer to eat fast food, either dining out or at home, given the convenience and affordable prices. This does not just apply in the biggest cities.

We expect restaurant chains to benefit from this theme. Retailers and hypermarkets with strong e-commerce platforms can benefit from the fast growth in grocery delivery business, which saves time for busy small-sized families.

ASEAN

In Indonesia, women are increasingly better educated and have a better school participation rate. The improvement is not just seen on a sequential basis, but is also seen when benchmarked against their male counterparts, especially at a higher education level.

According to data from Statistics Indonesia, in 2019 a higher percentage of girls (73.0%) in the age group 16-18 years were in school than boys (70.9%). This is an interesting development vs. a decade ago when 55.8% of boys were in school compared to 54.3% of girls. A similar trend is seen in higher education as well. In Indonesia, 9.5% of women have a university degree, slightly higher than the 9.0% of men. In 2009, this metric stood at 6.1% for women and 6.7% for men.

The higher education perhaps explains why there are more women entering the workforce and holding managerial roles. According to Statistics Indonesia, the percentage of women who hold the title of manager increased from 24.2% in 2016 to 30.6% in 2019.

The trend of more women working and women holding roles with higher roles is one of the reasons fuelling a rise in household income. This should drive higher discretionary spending and spending on better-quality goods. We see several categories benefitting from this trend. First, fashion retailing, especially in the premium-priced segment. Second, premium personal care products (skin care, hair care, and oral care) may see some benefit. Third, increased travel and holiday as a higher household income allows families to take more vacations or to travel to places further away. These first two categories deserve a mention because for women who work outside of the home, spending on clothes, skin care, and cosmetics is common.

We expect multi-brand retail operators, department stores, and health & beauty operators to benefit.

Rising mid-tier cities

- Urbanisation in mid-tier cities provide long-term investment opportunities in Asia, especially in India and Indonesia
- Internet adoption is still low in Asia, but it is rising rapidly leading to a boost in the internet economy
- Many companies are exposed to these trends, including retailers, convenience stores, and internet companies

Urbanisation is a key driver for penetration-led growth

In our chapter on urbanisation (page 29), we discuss in detail how countries in Asia have seen a substantial shift in their population to cities over the past few decades, as this is where most employment and wealth have been generated. However, even now, a large part of Asia is still living in rural areas, providing plenty of scope for further urbanisation.

Interestingly, instead of mega cities such as Shanghai, Mumbai, Delhi, Guangzhou, Bangkok, Manila, and Jakarta, most of the urbanisation is taking place in mid-tier cities such as Pune, Chennai, Ahmedabad, and Surat in India; Cebu in the Philippines; Samut Prakan in Thailand; or Makassar, Gresik, and Denpasar in Indonesia.

This trend is likely to accelerate post-COVID as we expect working-from-home to gain more acceptance, reducing the number of days a person might actually need to commute to an office.

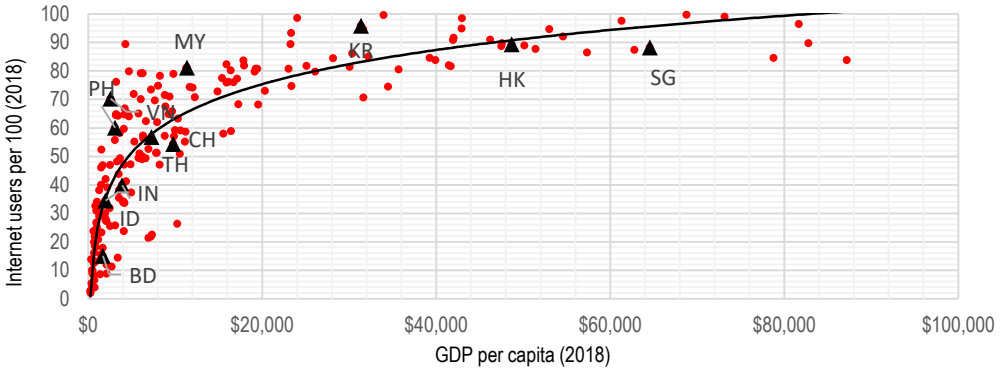
Urbanisation is expected to catalyse a shift in consumer preferences towards premium products, especially in the retail sector, as people move to cities in search of a better quality of life. In India think of increased demand for supermarkets and hypermarkets, as well as two-wheelers and multi-screen cinemas. Urbanisation also changes how a consumer buys. With better access to the internet, people are turning online, a trend which received a further boost from COVID-19. In China, with e-commerce penetration already at 75%, lower-tier cities are expected to further drive demand for internet names.

Offline to online demand shift

The proliferation of internet usage is rising in Asia. The internet is becoming an integral part of everyday life, especially in urban areas, be it for online shopping, booking tickets, looking for jobs, paying at brick-and-mortar stores, or even working from home. Most companies are responding to this by accelerating their technology spend to improve their online capabilities and expand fulfilment. Furthermore, with the outbreak of COVID-19, there has been a sharp jump in e-commerce penetration.

Exhibit 2 shows that internet usage tends to rise fast initially as income levels rise from low levels, and then tapers off at higher income levels. Indonesia and India are set to see fast growth in internet usage over the next decade, similar to the levels seen in China over the past few years.

Exhibit 2. Internet penetration and GDP/capita: India and Indonesia entering a fast-growth stage



Note: MY – Malaysia, IN – India, ID – Indonesia, PH – Philippines, KR – Korea, TH=Thailand, SG – Singapore, HK – Hong Kong, CH – mainland China, BD – Bangladesh, VN – Vietnam.
Source: World Bank, HSBC

Key factors that drive the success of online shopping across Asia are: (1) a limited choice in offline, brick-and-mortar retailers (compared with a wider range of products on offer online), (2) price-sensitive consumers, and (3) the ability to deliver goods in a short period of time.

With rising urbanisation and increasing broadband and mobile network penetration, the digital economy is expected to grow multifold. India's online retailing industry is still in its infancy; however, it is set to rise, given the consumer is typically price sensitive. In a busy city such as Beijing, consumers are increasingly relying on companies specialising in online-to-offline (O2O) to fulfil their needs, from ordering meals and fresh products, to refilling their fridges. Further user growth in China is likely to come from expansion into lower tier cities. While digital commerce has often been viewed as a secondary channel in ASEAN, companies are now beginning to reorient their businesses towards online. Many customers are ordering online for the first time and discovering there are viable alternatives.

Impact across countries

India

Like the rest of Asia, urbanisation is the key theme for India, which along with a young population, will continue to influence consumer preferences. This will lead to not only penetration-led growth in several consumer categories (like fast-moving consumer goods) but also fuel the premiumisation trend too (like jewellery).

According to the UN's World Urbanization Prospects 2018 report, 35% of India's population lives in urban cities, a gain of 3% since the census of 2011. But this trend is accelerating driven by rising aspirations, increased access to digital media, and the search for a better quality of life. This has large implications for consumption habits and levels of income. It also coincides with a large expected rise of middle class households (a key consuming economic segment) in the next decade. India potentially could have c150-160m middle class households by 2030e, a potential addition of c100m households to the middle class households in the next decade.

Most of the fast-moving consumer goods (FMCG) companies are key beneficiaries of this tailwind as it is a major catalyst for not only the penetration-led growth, but also instrumental in premiuimsation-led growth driven by rising income levels. However, if we were to highlight the single largest beneficiary of this trend, it would be modern grocery retail. As urban cities continue to grow, so too are large supermarkets. As such this category, known as modern trade, is just 3%

of the grocery retail today but is growing at twice the growth rate of traditional trade and we think this structural growth will continue apace over the next decade too. Given the large, value seeking, consumer base, discount retailers stand out as key long-term beneficiaries in India.

Other beneficiaries of urbanisation and rising middle class themes are home improvement names. Companies in fashion and accessories could also benefit as companies make the transition from unorganised to organised sector driven by the rising number of urban middle class.

In addition, an aspirational urban middle class, in search of a better quality of life, should benefit sectors such as travel and leisure, consumer durables and in turn consumer finance companies. Autos and two wheelers are well positioned to gain from the urbanisation trend.

Another way to play this theme in India is through "out-of-home" entertainment demand. India lags behind other countries in terms of the number of screens per 100,000 people. India, with a population of 1.3bn only has around 3,000 multiplex screens in the whole country. Conversely, India produces more films than any other country and also has the biggest cinema audiences. Urbanisation is expected to increase demand for high-quality theatres and multiple screen cinemas.

With India already at the cusp of a multi-fold increase in internet penetration, we think companies with exposure to food and grocery delivery, ecommerce or online education would benefit from this theme.

ASEAN

According to data from the United Nations Population Division, 56% of Indonesia's population lived in urban areas in 2019, up from 41% in 1999. Indonesia has one of the fastest urbanisation trends in Southeast Asia – a record that is only matched by Thailand.

This trend impacts company's earnings in several ways. First, we expect higher sales of convenience food as people want a quick and filling meal. Second, we also expect urbanisation to drive the sale of discretionary items such as clothing and shoes as the newly urbanised population have increased their purchasing power. Thirdly, we see more online activity leading to higher e-commerce adoption.

According to the "Google & Temasek/Bain, e-Conomy SEA 2019" report, Southeast Asia's internet economy has tripled over the past four years to USD100bn in FY19. By FY25e, the internet economy is expected to triple to USD300bn. Within Southeast Asia, Indonesia and Vietnam are the fastest growth markets, which are also key focus markets for Sea (detailed below). Within the internet economy, we expect e-commerce Gross Merchandise Value (GMV) to grow 4x to USD153bn by FY25e and online gaming GMV to grow at a CAGR of 14% in FY19-25e to USD9bn.

COVID-19 has further accelerated the adoption of e-commerce in Southeast Asia due to: (1) a rise in the online user base, which can be converted to sustainable e-retail customers; (2) a convenient shopping experience with a wide array of selection for consumers vs. visiting often crowded offline outlets; (3) more merchants (sellers) embracing e-commerce to mitigate losses from operating offline retail sales; and (4) brands pivoting to e-commerce, which can help to expand the B2C share within GMV, and improve customer stickiness and the margin profile.

China

The China internet space has enjoyed the “population dividend” over the past decade, with the rising population providing internet companies with opportunities to grow their businesses.

China accounts for the world’s largest e-commerce market. The percentage of online retail sales of physical goods in China reached 27% in the second quarter of 2020, up from 10% in 2014. With 710m users (March 2020, according to CNNIC), online shopping in mainland China has a penetration rate of 79%. We think further user growth is likely to come from expansion into lower tier cities, which contribute 54% to new mobile e-commerce user growth, according to QuestMobile. For residents in lower-tier cities, value-for-money products are the most attractive. We see long-term user growth in lower-tier cities driven by superior user experiences, strong technology capabilities, and diverse product offerings instead of one-off rebates and subsidies.

We expect e-commerce companies with diverse product offerings and strong delivery networks to benefit and expand their presence in low-tier cities. Also, online marketing companies, as they have been playing an increasingly important role for brands to gain access to as well as appeal to the Chinese consumer. COVID-19 has already influenced the customer behaviour regarding food delivery, something we believe which is not just temporary. We expect food delivery companies to benefit from increasing demand for online food orders.

Lastly, urbanisation should also benefit the online travel industry, especially the ones catering to lower-tier cities and low-end domestic travel segment. According to the three-largest Chinese airlines, domestic air passenger numbers bottomed out in March post the impact of COVID-19, while international travel has continued to struggle. The recovery in lower-tier cities was stronger than in higher-tier cities, which is likely due to the stricter quarantine measures adopted in higher-tier cities.

Health and wellness

- Urbanisation, ageing, diet changes, and rising incomes have naturally raised demand for healthcare
- Demand and healthcare expenditures are likely to continue to rise, as will demand for health products
- Sectors to benefit are wellness products, health equipment, and traditional medicine

The rising tide in healthcare demand

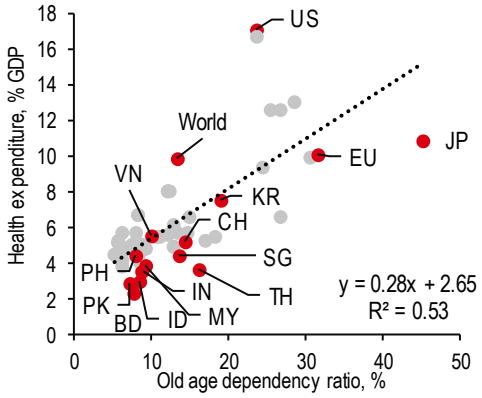
Asians are becoming increasingly health conscious, in part because they are getting richer and want to live longer. It's also because they are ageing – older people have to spend more on healthcare than younger people as 'wear and tear' starts to become more apparent. It might well be that COVID-19 changes people's perceptions to personal care, hygiene, and health in general.

Ageing is naturally linked to rising health expenditures. But urbanisation is also important. As people move to cities, incomes rise and diets change. That raises not only the propensity to spend more on healthcare but the necessity to do so as people consume more meat, sugar, dairy, and alcohol. This has also led to increasing obesity rates in Asia (see *Sugar, fat, salt and obesity: What global investors should know*, 26 February 2019). It also has consequences on the increasing prevalence of chronic diseases. A China-Cornell-Oxford Project found that chronic degenerative diseases (cancer, diabetes, cardiovascular) are more prevalent in urbanised centres. The study also finds that these chronic diseases are correlated with increased intakes of meat, dairy, and fat[5].

As urbanisation continues, especially in Southeast Asia where the scope for further urbanisation is higher, demand for healthcare will naturally rise too. Asia seemingly still spends less than expected on healthcare (Exhibits 3-4). This may provide further fuel to increasing healthcare expenditures not only to "catch up" to current world standards but also to "keep up" with ageing, urbanising, and increasingly unhealthy demographic trends.

5 The China-Cornell-Oxford Project: On Nutrition, environment and Health at Cornell University.

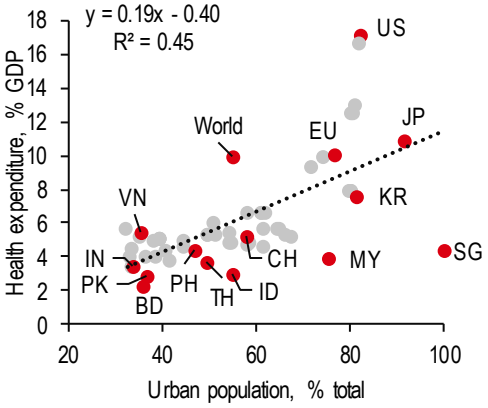
Exhibit 3. Health expenditure highly correlated to old age dependency…



Note: Most recent 2017. MY – Malaysia, IN – India, ID – Indonesia, PH – Philippines, KR – Korea, TH – Thailand, CH – mainland China, JP – Japan, BD – Bangladesh, PK – Pakistan, VN – Vietnam, SG – Singapore, EU – European Union, US – United States.

Source: World Bank, HSBC

Exhibit 4. …and high urbanisation rates



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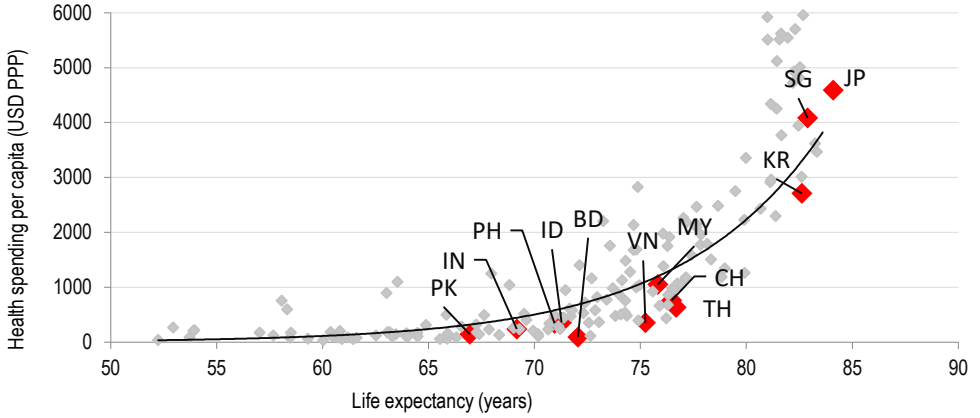
Source: World Bank, HSBC

In terms of per capita spending on healthcare in Purchasing Power Parity (PPP) terms, China leads in Asia with a CAGR of 13% over the past ten years, followed by Singapore's 9% growth. As mentioned earlier, even with strong structural growth, healthcare expenditure is lower than expected in many Asian economies (excluding Japan and Singapore).

Exhibit 5. Healthcare expenditure remains low given life expectancies in Asia (2017)



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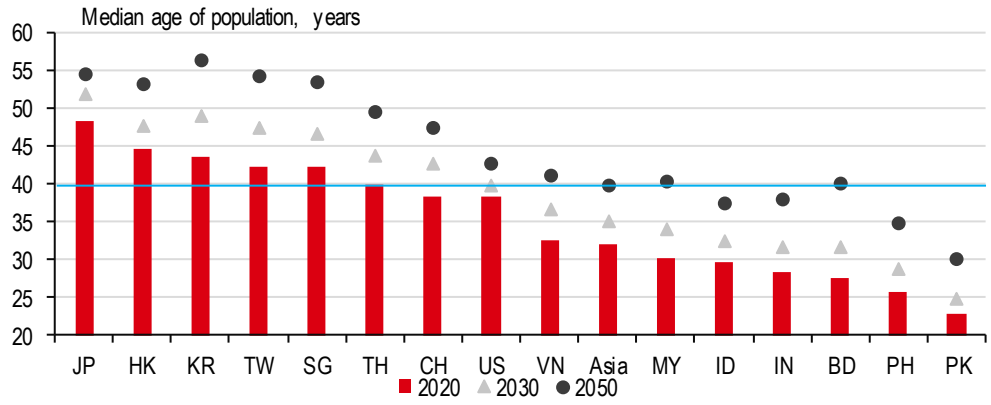
Source: World Bank, HSBC

Growth in healthcare spending is not just determined by how many old people there are in a country, but also the number of people that celebrate their 40th birthday every year. That's because beyond that age healthcare spending really starts to increase. This is particularly important in China where the majority of people will be older than 40 by 2030e. Currently the median age is 38. But take a look also at ASEAN too (Exhibit 6). By 2050, Vietnam, Malaysia, and Thailand will all see their populations rise above 40. Healthcare will become increasingly important in these currently "young" nations.

Exhibit 6. Majority of people in North Asia, Thailand, and Singapore will be older than 40 by 2030e



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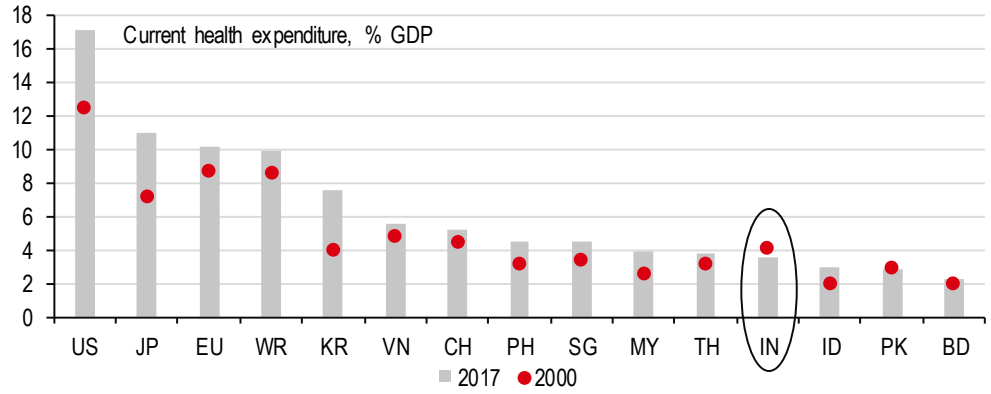
Source: UN World Population Prospects 2019, HSBC

All Asian markets have seen growth in healthcare spending outpace GDP growth over the past two decades. The only exception is India. In China, c5% of GDP in 2017 was spent on healthcare goods and services vs. 11% in Japan and 17% in the US. It is the lowest in South Asian countries. In India, for example, it is only 4%.

Exhibit 7. Proportional to GDP, spending on healthcare has risen everywhere except India

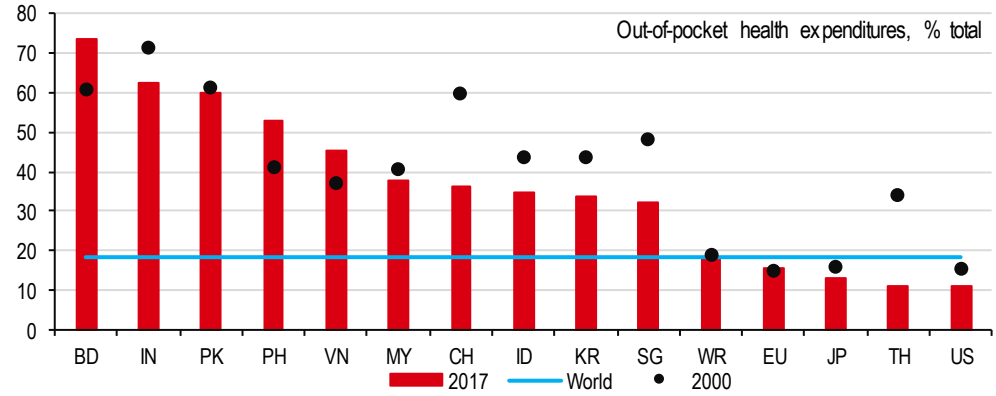


Note: MY – Malaysia, BD – Bangladesh, IN – India, PK – Pakistan, VN – Vietnam, ID – Indonesia, PH – Philippines, JP – Japan, KR – Korea, TH – Thailand, SG – Singapore, HK – Hong Kong, WR – World, EU – Europe, CH – mainland China, US – United States.
Source: World Bank, HSBC

The rise in healthcare expenditure has been largely supported by an increase in government support. Government expenditure has risen 9% each year since 2000 in Asia ex-Japan vs. a rise of just 6% for private spending. In 2000 about 42% of healthcare expenses per capita were made by the government. In 2017 that rose to 52%.

Although the majority of healthcare expenditure is now supported by the government, a significant burden still falls on Asia's households across the board. Most of ASEAN relies on private contributions to pay for healthcare. In the Philippines, India, and Bangladesh, private expenditure accounts for about 70% or more of total healthcare expenditure. Worryingly, most of this is not supported by corporate health plans, putting an extra burden on household income.

Exhibit 8. Asia still pays a lot out of pocket for healthcare



Note: MY – Malaysia, IN – India, ID – Indonesia, PH – Philippines, KR – Korea, TH – Thailand, CH – mainland China, JP – Japan, BD – Bangladesh, PK – Pakistan, VN – Vietnam, SG – Singapore., US – United States, WR – World, EU – European Union
Source: World Bank, HSBC

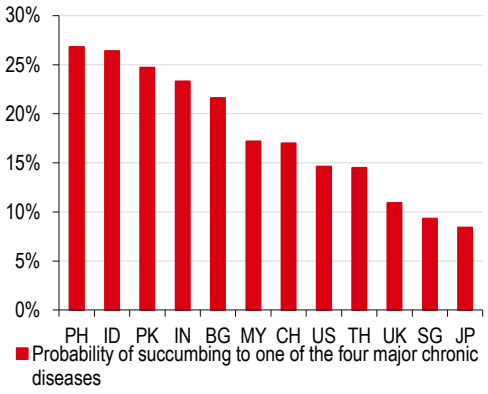
Chronic diseases

According to the World Health Organisation (WHO), more than 70% of the world's population succumbs to non-communicable diseases, with most passing away from four chronic diseases: cardiovascular diseases, cancer, respiratory diseases, and diabetes. The risks associated with these four diseases are much higher in countries like the Philippines, Indonesia and India than they are for Japan or Thailand.

One in six urban Chinese residents may suffer from two or more chronic conditions by 2028e

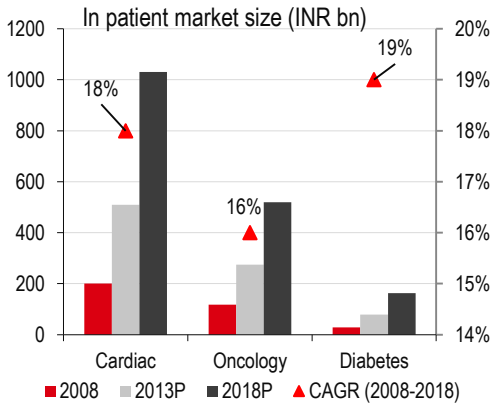
According to data from Global Demographics, by 2028, the number of people in urban China suffering from chronic[6] diseases is expected to increase to 336m (from 209m in 2008, a CAGR of c5%) with the total urban cohort rising to 989m people. Assuming those that have at least one chronic condition are susceptible to other issues (as they tend to be less healthy), one in every six urban Chinese residents may suffer from two or more chronic diseases by 2028e. Based on this, expenditure on healthcare might increase to 9-10% of GDP (from 5.2% now) over the next 1-2 decades, depending on China's economic prosperity.

Exhibit 9. Probability of succumbing to one of the four major chronic diseases (2016)



Note: PH-Philippines ID-Indonesia PK-Pakistan IN-India BG-Bangladesh MY-Malaysia CH-China US-US TH-Thailand UK-UK SG-Singapore JP-Japan
Source: WHO World health statistics 2020, HSBC

Exhibit 10. Market for cardiac and oncology conditions and diabetes in India



Source: CRISIL Research, HSBC

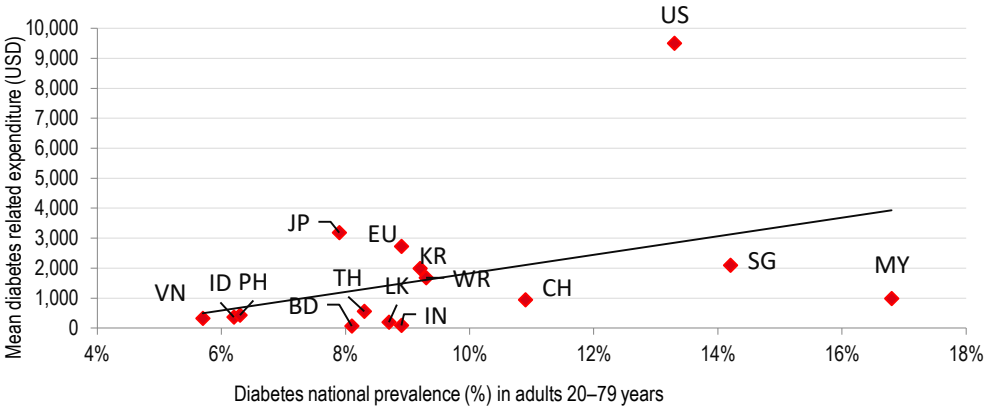
6 Diabetes, Asthma, Chronic obstructive pulmonary disease, Hypertension and Stroke

Exhibit 10 shows how the market has expanded from 2008 to 2018 for cardiac, oncology conditions, and diabetes in India. Non-communicable diseases (NCD) are expected to account for 73% of deaths in India in 2030e, up from 62% in 2016. As per the World Economic Forum, global NCD treatments will cost nearly USD30trn by 2030e. India's share of this burden will be USD4.8trn, which is more than 50% of its GDP.

The International Diabetes Federation estimates that of the 463m diabetes patients in the world, a quarter are in China, and 17% are in India. India accounts for world's largest diabetes-related mortality, with Southeast Asia spending the least of its healthcare expenditure on diabetes, at just 8.4%. According to Malaysia's Ministry of Health, one in three adults is likely to suffer from diabetes in Malaysia by 2025e. Exhibit 11 shows how current spending levels remain low.

> **"…of the 463m diabetes patients in the world, a quarter are in China and 17% are in India**

Exhibit 11. Diabetes-related expenditure to increase in China and South Asian countries



Note: MY=Malaysia, BD=Bangladesh, IN=India, PK=Pakistan, VN=Viet Nam, ID=Indonesia, PH=Philippines, PH=Philippines, LK=Sri Lanka, JP=Japan, KR= Korea, TW= Taiwan , TH=Thailand, SG=Singapore, HK= Hong Kong., WR – World, EU – Europe.
Source: IDF Atlas 2019, HSBC

As per our Healthcare team, China's insulin market is expected to grow at double-digits over the near term driven by the prevalence of diabetes caused by an increase in the older population, lifestyle changes, growing awareness of the disease, and a rise in sales of new generation insulin products.

Healthy living

The trend towards a healthy lifestyle should promote sales of healthcare equipment and bicycles. The COVID-19 outbreak seems to have encouraged bike enthusiasts to literally "get on their bike" (or buy a new bicycle). Looking beyond the health benefits, people wary of contracting COVID-19 on public transportation and social distancing have been using bicycles as a way to commute. Many countries have already reported a noticeable uptick in bicycle sales even as cities in Europe and the US remain in lockdown.

An increase in demand for natural remedies has resulted in an increase in demand for traditional and herbal medicine in Asia. Traditional Chinese medicine (TCM) is a large industry in China, with over 1.16bn visits to Chinese medical hospitals and clinics in 2019, a growth rate

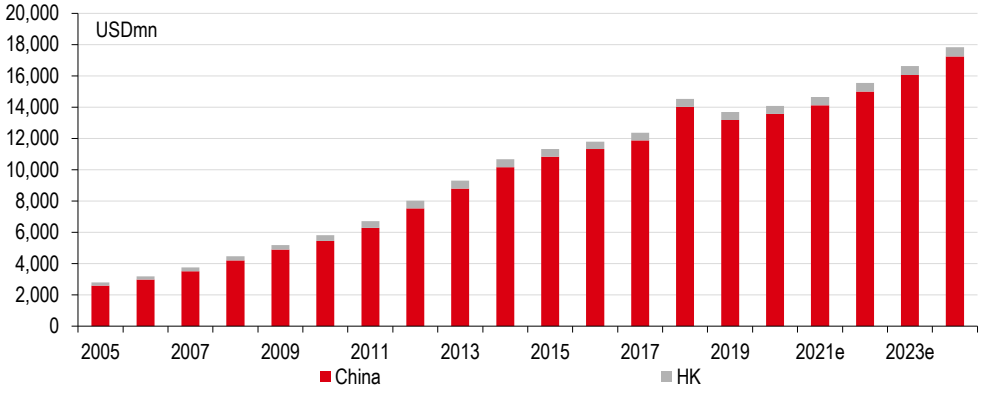
of 9% y-o-y (according to the National Health Commission of the PRC). Even in overseas markets, the popularity of TCM has been increasing in recent years, led by the trend to favour natural and herbal medical services. Total exports of Chinese herbs and TCM increased nearly 270% and 140%, respectively, over the past 10 years (i.e., 2008-17). Exhibit 12 shows that the market size of traditional products[7] is expected to grow at a CAGR of 10% in mainland China and Hong Kong in 2005-24e.

> **Traditional Chinese medicine is a large industry in China, with over 1.16bn visits to Chinese medical hospitals and clinics in 2017.**

According to the Confederation of Indian Industry (CII), so-called "AYUSH" medicine – ayurveda, yoga, siddha, and homoeopathy – is set to grow rapidly. That market stood at USD3bn in 2017 and India's government predicts it to more than triple to USD10bn by 2022e.

However, it's not just India. The size of the herbal medicine market in Indonesia was nearly USD1bn in 2019 – a market that is growing at a CAGR of c10%.

Exhibit 12. Market size of herbal/traditional products expected to grow by a CAGR of 10%



Note: Converted to USD using year-end FX rates, 2019 end rates used for estimates.
Source: Euromonitor, HSBC

Implications

This all suggests that although there have been significant gains in Asia's healthcare systems, there is still significant growth to: (1) catch up given current demographics and (2) keep growing as urbanisation continues, old age dependencies rise, life expectancy is extended, and health issues become more prevalent.

The risks associated with chronic diseases are increasing and Asian companies are reacting to this. Companies are gradually moving away from acute therapies for fever, infections or a cough to medicine for longer-lasting conditions such as cancer and diabetes. Health awareness and the rising risk of such diseases, means more business for some pharma companies and hospitals. An increasing inclination towards healthy lifestyles should also promote sales of health equipment, bicycles, health supplement products, wellness products, sportswear, and traditional medicine.

7 Botanicals or traditional remedies are products that have a long tradition of use, decades of established reputation, and are considered alternative remedies to standard medicine. Traditional medicine remedies such as Ayurveda, traditional Chinese medicine (TCM), Unani, Kampo, etc., are included. Homeopathic remedies are excluded. Only packaged products are tracked.

Amidst all of this, COVID-19 is likely to accelerate the healthcare trends we are witnessing. The pandemic is likely to raise already growing health awareness in Asia. Consumers may place greater importance on healthy lifestyles, hygiene, and rising adoption for telemedicine services. COVID-19 has also raised the issue of supply chain self-sufficiency, where in India there has been renewed discussion on self-reliance in pharmaceutical ingredients.

Asset accumulation

- Asians live longer, work longer, and accumulate more savings to finance longer retirements
- Their wealth is likely to rise from USD15trn in 2010 to USD108trn in 2050e
- Many industries may benefit from these trends including asset gatherers, brokerages, and banks

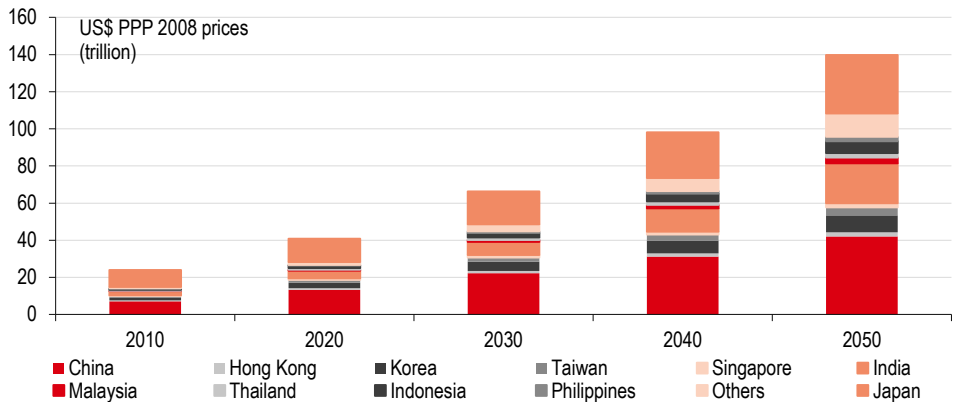
Asset accumulation

As Asians live longer, there will naturally be more people in retirement, and they'll need more money for that; however, ageing has a secondary impact on the accumulation of assets as elderly people tend to have more wealth than younger people.

We can estimate how much more money people will need to accumulate to ensure stable consumption through retirement. It's basically looking at savings behaviour over a person's life cycle and transposing demographics on to this to establish an estimate. We call these '*pension assets'* and it includes assets held in the form of cash, real estate, insurance, and mutual funds. This is not something we invented ourselves but our analysis builds on models developed by the Asian Development Bank.

It suggests that by 2010, Asians (ex-Japan) had already accumulated USD15trn in pension assets – this is expected to grow to USD108trn[8] by 2050e, with more than half coming from East Asian economies. That is a CAGR of 5% over a 40-year period. Note that between 2020 and 2030, c40% of the growth in Asian pension assets is expected to come from mainland China.

Exhibit 13. Total pension assets in Asian markets, 2010-50e



Note: China refers to mainland China.
Source: HSBC calculations and estimates (following the approach set out by the ADB working paper: Population, Wealth, and Economic Growth in the Asia and Pacific Region by Andrew Mason, Sang-Hyop Lee).

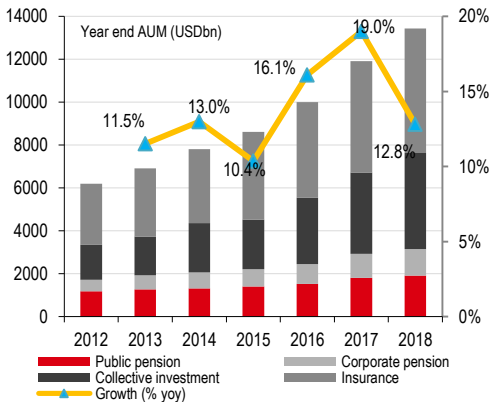
8 PPP in US dollars 2008 prices.

Growth could be even higher because in many countries, the actual level of wealth required and what they have saved so far doesn't match. This means they need to take a step back in terms of their current lifestyle as they get older to save more. If they step up their savings, the wealth growth rate could rise to 8.8% p.a. up to 2050e. This savings gap is particularly prevalent in countries such as India, Vietnam, mainland China, and Korea.

> **…by 2010, Asians had already accumulated USD15trn in pension assets and this is expected to grow to USD108trn by 2050e, with more than half coming from East Asian economies.**

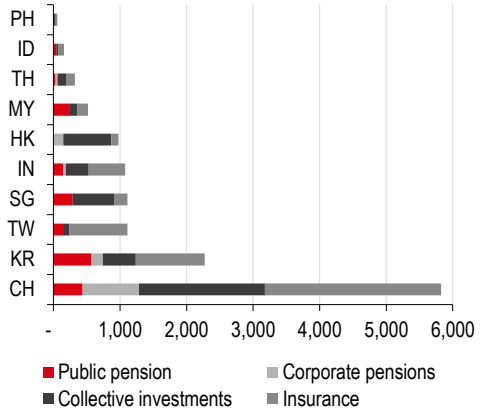
We can also do a bottom-up analysis and establish how much wealth is managed by the larger investment funds in each country. This is possible only for those funds that make their investments publicly available. From this we calculate that, as of December 2018, total assets managed by domestic investors (including pension, insurance, and mutual funds) in Asia stood at USD13.4trn, up c12.8% from the previous year. Total AUM as a percentage of GDP for the region now stands at 62.9%, up from 40% in 2011.

Exhibit 14. Domestic institutional assets grew 12.8% in 2018 in Asia



Source: Local regulatory authorities, fund associations, IMF, Bloomberg, CEIC, HSBC

Exhibit 15. Size of assets by country (USDbn) (2018)

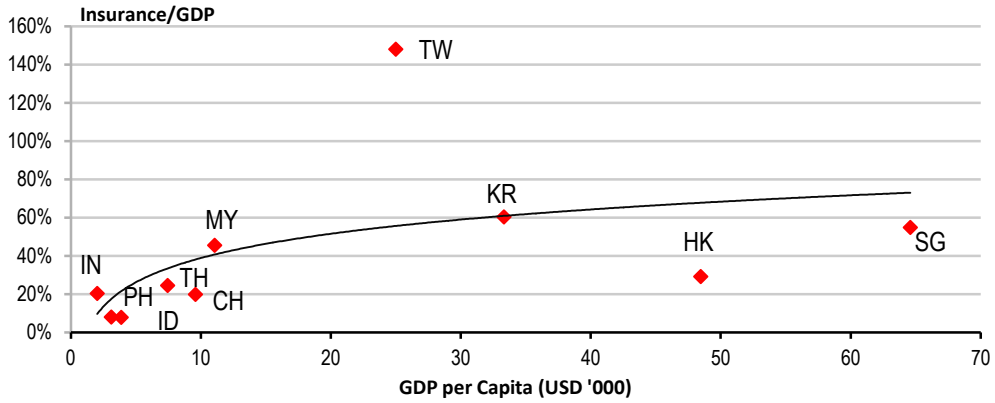


Note: MY – Malaysia, IN – India, ID – Indonesia, PH – Philippines, KR – Korea, TW – Taiwan, TH – Thailand, SG – Singapore, HK – Hong Kong, CH – mainland China.
Source: Local regulatory authorities, fund associations, IMF, Bloomberg, CEIC, HSBC

This bottom-up, fund-by-fund analysis allows us to dig a little deeper and assess the asset mix. The region can be split into two groups. One group has a strong institutional framework already in place, while the other does not. Markets with higher per capita GDP also have a strong institutional framework. Singapore, Hong Kong, Korea, Taiwan, and Malaysia are in this category as they have well-developed insurance and pension systems. For example, Korea's National Pension Fund (NPF) is one of the largest in the world with USD462bn in total assets.

Singapore and Hong Kong lead in terms of penetration with collective investment schemes (such as mutual funds and exchange-traded funds or ETFs) forming more than 50% of total assets, simply because a large pool of asset managers is located in the two cities. However, in Taiwan, we find that insurance is more dominant (Exhibit 16).

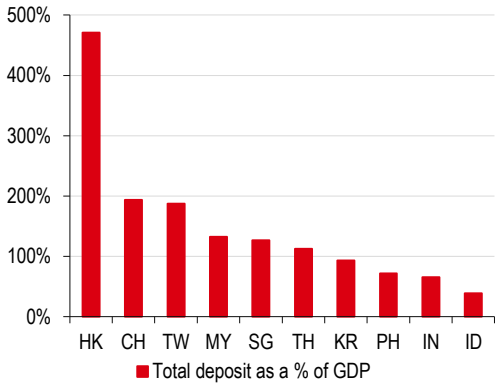
Exhibit 16: Taiwan has high insurance penetration



Note: MY – Malaysia, IN – India, ID – Indonesia, PH – Philippines, KR – Korea, TW – Taiwan, TH – Thailand, SG – Singapore, HK – Hong Kong, CH – mainland China
Source: HSBC

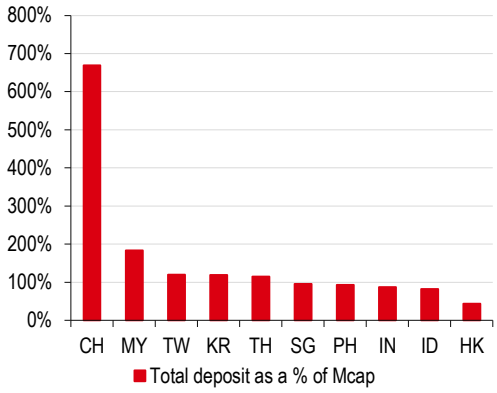
Exhibits 17 and 18 indicate that the total amount of deposits as a percentage of equity market capitalisation or GDP is still low, especially in markets such as India and Indonesia. This reflects the relatively low level of banking penetration in these countries.

Exhibit 17: Total deposit as a % of GDP 2018



Note: MY – Malaysia, IN – India, ID – Indonesia, PH – Philippines, KR – Korea, TW – Taiwan, TH – Thailand, SG – Singapore, HK – Hong Kong, CH – mainland China
Source: CEIC, HSBC

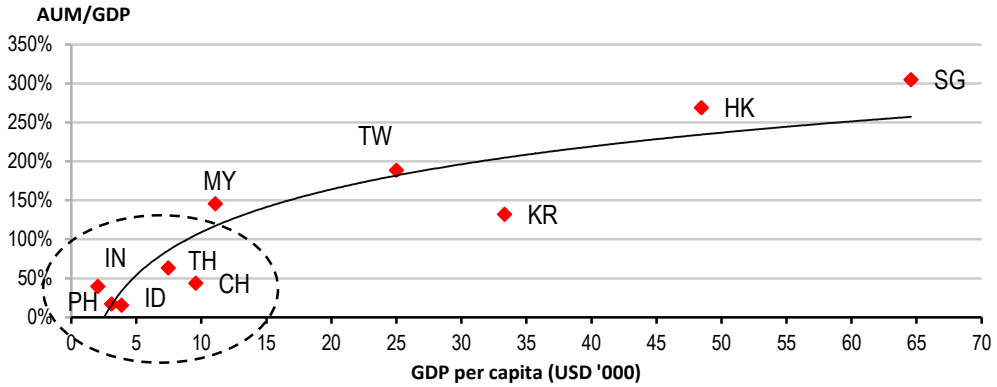
Exhibit 18: Total deposit as a % of market cap (2018)



Note: MY – Malaysia, IN – India, ID – Indonesia, PH – Philippines, KR – Korea, TW – Taiwan, TH – Thailand, SG – Singapore, HK – Hong Kong, CH – mainland China
Source: CEIC, HSBC

Thus, Asia as a whole is witnessing impressive growth in domestic AUM, and as people age and work longer, we expect this trend to continue at a faster pace.

Exhibit 19: Tier two countries, with lower AUM/GDP, to provide the next leg of growth across Asia



Note: MY – Malaysia, IN – India, ID – Indonesia, PH – Philippines, KR – Korea, TW – Taiwan, TH – Thailand, SG – Singapore, HK – Hong Kong, CH – mainland China
Source: Local regulatory authorities, fund associations, IMF, Bloomberg, CEIC, HSBC

The grey line in Exhibit 19 illustrates the linear relationship between levels of income by country and the AUM. Wealthier countries will have more AUM as more savings are channelled into financial products.

From this, we argue that there are two drivers to growth in AUM.

- **"Crawl towards the grey line"**. First of all, a better institutional framework allows countries to raise AUM to levels commensurate with their level of GDP/capita. China in particular, for its level of income, has low amounts of AUM. It can "crawl' towards the grey line, which shows some linear relationship between AUM and levels of GDP.
- **"Crawl along the grey line"**. Secondly, as incomes rise, so does AUM. This is "crawling along" the grey line. India and Thailand, for example, should see most of this growth.

Another trend that is infolding in Asia is that a lot of saving is now done online. Mainland China's affluent population are flocking to online wealth managers as the industry moves into a new phase, fuelled by a combination of more investable assets on offer to individuals, and improving technology for users. Garnering attention from around the world was Alibaba's Yuebao – started in 2013 – that quickly became the world's largest money market fund as the high yields attracted millions of mainland Chinese investors. The barriers to entry though are high (see *China Wealthtech – A wealth of opportunity for online money managers*, 17 July 2019).

There are various industries that can benefit from these developments: (1) asset gatherers; (2) banks and insurers; (3) stock exchanges should benefit from larger Asian participation in equity products; and (4) the online wealth management industry. It can be divided into four key segments: digital brokerages, financial marketplaces (online platforms that sell financial products), investment advisories with robo-advisors and technology services (Fintech and IT providers that specialise in the finance industry); and (5) brokers.

Demographic trends

Urbanisation

- Asians continue to flock to urban centres
- Most urbanisation is happening in mid-tier cities, not mega cities
- Urbanisation typically increases the literacy rates and raises the ability to generate income

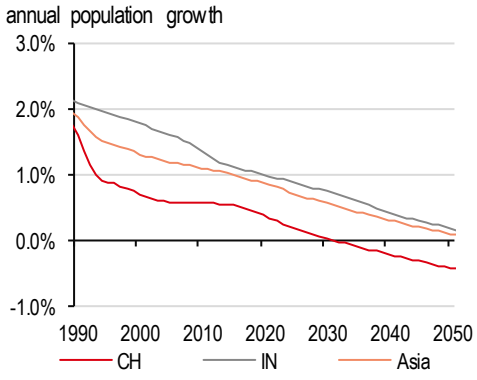
A turning point is coming

Before we look at how people in Asia are moving from the countryside to towns and cities, we first need to examine just how many people there are in the region. By analysing North Asia, and Japan in particular, we find they are already dealing with some of the challenges that China will face in the future as its population starts to peak, and then eventually declines. Interestingly, we find in Japan a decline in population, but a rise in the number of people employed and a rise in income.

Before the end of this decade, India will grow bigger in population than China. Indeed, China's population will start to decline by the end of this decade and markets will start to consider the implications of this well before that. In very general terms, lower population growth might result in lower volume growth. If this is the case, growth will increasingly depend on the ability to raise prices – possibly by offering better quality products. This is, again, linked to employment, household composition, income growth, premiumisation, and companies' ability to improve product quality that warrants price increases.

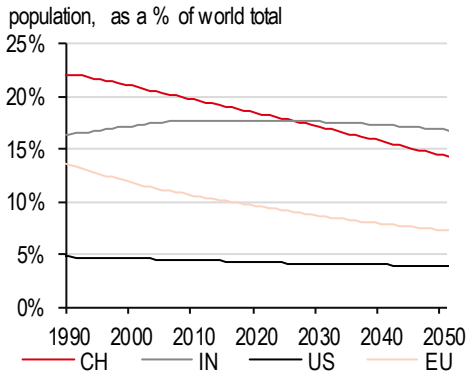
We discuss these issues throughout the report. In this chapter, we examine urbanisation and highlight where those Asian consumers are located.

Exhibit 20. China's population will begin to decline by the next decade



Source: UN World Population Prospects, HSBC

Exhibit 21. And India's population will be the largest



Source: UN World Population Prospects, HSBC

Mid-tier cities, not mega cities

Urbanisation in Asia is still low compared to Europe and North America…

Many of the trends we discuss in this report are linked to ongoing urbanisation across Asia. The region has seen a substantial shift in its population to cities over the past few decades, as this is where most employment and wealth have been generated. However, even now, a large part of Asia is still non-urban and many Asians are living in rural areas like villages. The United Nations (UN) estimates that the average urbanisation ratio in Asia is 51% compared with 75% in Europe, and 83% in North America.

51%

Urbanisation ratio in Asia, compares to 75% in Europe and 83% in North America

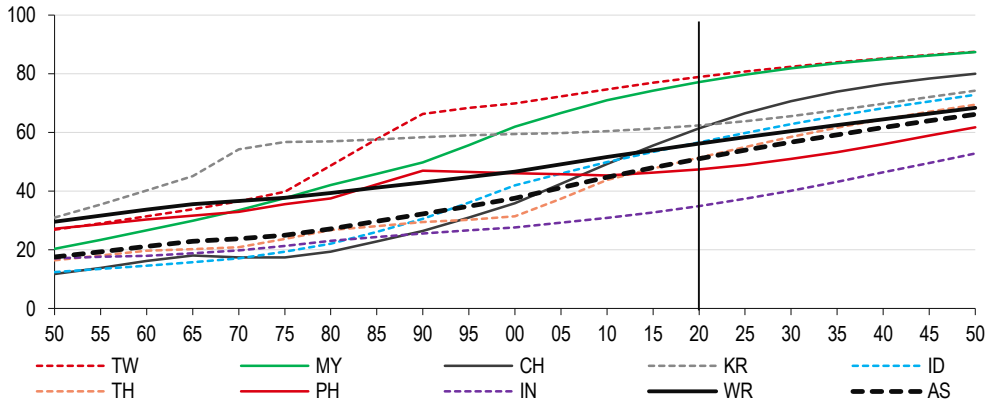
Exhibit 22 shows that, in Indonesia, people are moving into cities at a rapid pace. 56% of Indonesia's population lived in urban areas in 2019, up from 41% in 1999, one of the fastest urbanisation trends in Southeast Asia.

Urbanisation in India is estimated to rise, but relatively slowly, from 35% in 2020 to just 40% in 2030e, much less than Asia's expected average of 57%. A similarly muted trend is seen in the Philippines.

…providing scope for further urbanisation, which brings benefits like lower fertility rates and higher education

The key here is that in large parts of Asia there is plenty of scope for further urbanisation. This process has all kinds of accompanying benefits: fertility rates are lower in cities and towns than in the countryside, access to education is better, and the probability of getting a job is much higher. However, these benefits have not spread across Asia evenly.

Exhibit 22. India is expected to be 40% urbanised by 2030e



Note: MY – Malaysia, IN – India, ID – Indonesia, PH – Philippines, KR – Korea, TW – Taiwan, TH – Thailand, CH – mainland China, AS – Asia, WR – World.
Source: World Urbanization Prospectus 2018, UN estimates, HSBC

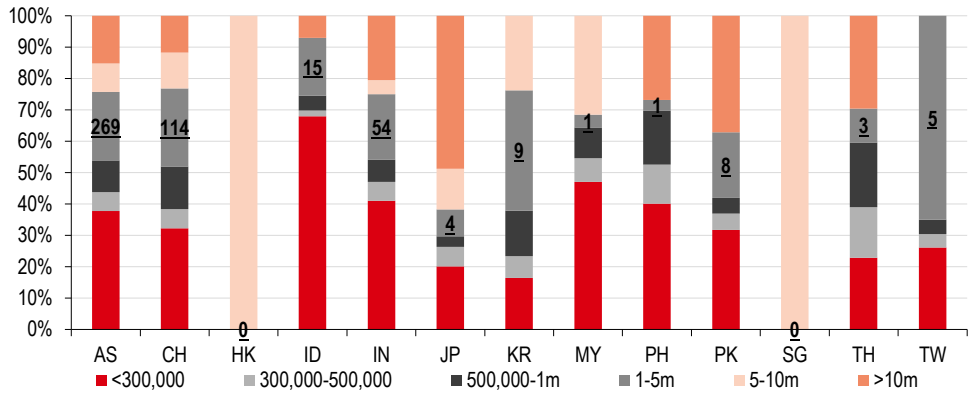
Most urbanisation is happening in mid-tier cities and mega cities

One commonly held view is that urbanisation in Asia is dominated by the growth of mega cities such as Tokyo, Delhi, Shanghai, Mumbai, Guangzhou, Bangkok, Manila, and Jakarta. This may be true in some cases. According to the United Nation's World Urbanization Prospectus, of

Asia's urban population as a whole (in 2020) only 15% lived in mega cities[9], while 38% lived in small cities with a population below 300,000 and 22% in mid-tier cities with a population between 1m and 5m. This compares to 1990 when 8% of the urban population lived in mega cities, 49% in small cities, and 18% in mid-tier cities.

As such, most of the urbanisation is taking place in mid-tier cities. While the number of mega cities has increased from five in 1990 to 21 now and an estimated 27 in 2030e, the number of mid-tier cities has increased from 99 in 1990 to 269 in 2020 and an estimated 330 in 2030e. Economic growth is likely to be concentrated around these cities, and the largest share of infrastructure will be built in these urban centres.

Exhibit 23. 18% of the urban population lives in mid-cities in Asia in 2020



Note: MY – Malaysia, IN – India, ID – Indonesia, PH – Philippines, KR – Korea, TW – Taiwan, TH – Thailand, SG – Singapore, HK – Hong Kong, CH – mainland China, AS – Asia, JP – Japan, PK – Pakistan. The labels in chart show the number of mid-tier cities.
Source: World Urbanization Prospectus 2018, United Nations, HSBC.

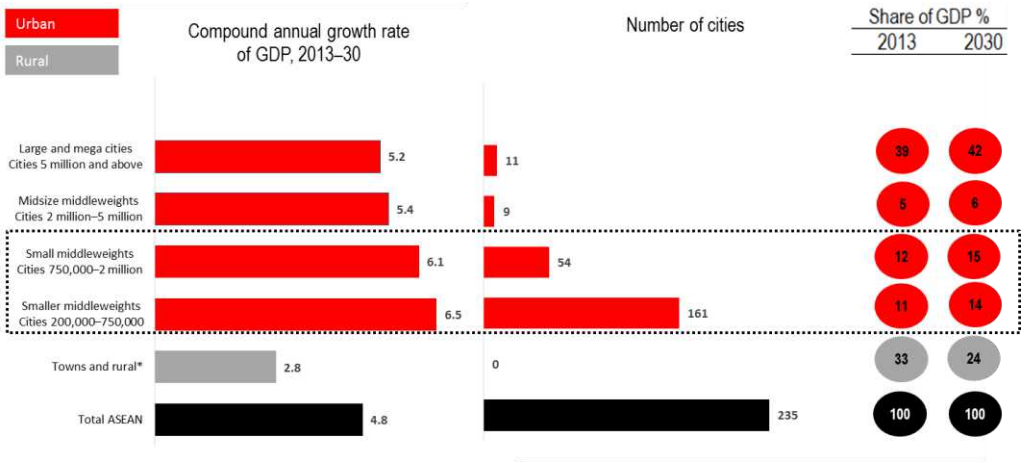
Smaller cities that are expected to grow fast include Denpasar in Indonesia and Cebu in the Philippines

The list of smaller cities that are expected to grow in excess of 50% up to 2025e includes Gresik, Makassar, Denpasar and Batam in Indonesia, Cebu in the Philippines, and Samut Prakan in Thailand.[10] This is also illustrated in McKinsey's work on urbanisation across ASEAN. Exhibit 24 shows that in ASEAN, small- and medium-sized cities drive future economic growth, as this is where the population is moving to.

In Indonesia, some relatively smaller cities are becoming growth hot spots. Gresik in East Java is a case in point: the city has only about 1.2m inhabitants but nearly 60% of them are in the 'consuming class' – a cohort where discretionary spending is 12% higher than the Indonesian urban average.

9 Cities with a population of more than 10m.
10 "ASEAN's secondary cities poised to boom", Alan Boyd, Asia Times, 27 July 2017

Exhibit 24. Smaller urban areas to post faster growth than the region's larger cities



Note: *Includes cities with fewer than 200,000 inhabitants.
Source: McKinsey Global Institute Cityscape database, National statistics offices, McKinsey Global Institute analysis (rework of Exhibit E4 on page 8 of *Southeast Asia at the crossroads: Three paths to prosperity*), HSBC.

Urbanisation has a significant impact on how people live, if they get married, what education they receive, and if they can find a job. In the next chapter, we focus on the skills people need to get a job in the first place, especially literacy.

Education

- Mainland Chinese, Singapore, and Hong Kong students score well in secondary school tests; Vietnam is on par with that of the US
- Education is the key to employment potential and labour productivity…
- …and it also drives the potential for companies to move up the value-added ladder and for people to create new companies

Literacy, education, and urbanisation

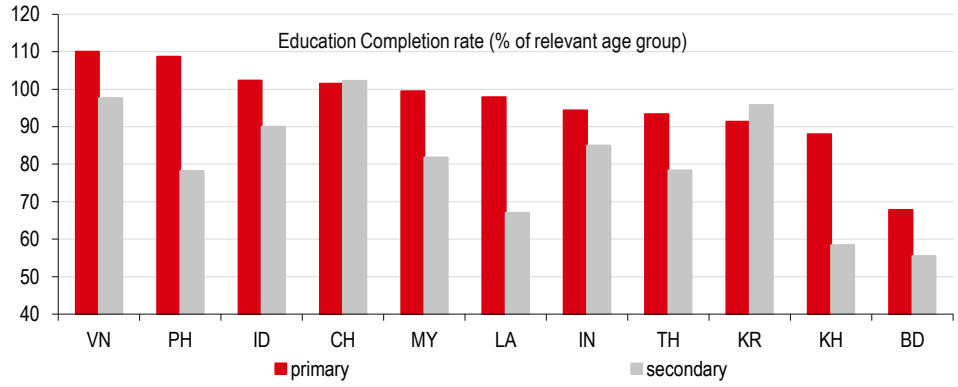
A disparity in literacy

Access to education is much better in cities than in villages and, as such, literacy rates tend to be higher in urban areas. That's a problem as most jobs in urban areas, even in manufacturing, require a basic skill set, yet people in rural areas often find it difficult to acquire these skills.[11]

China has a low primary education completion rate; however, those who complete it, finish secondary education

There are major differences in general education levels across Asia (Exhibit 25). Vietnam scores well on students completing both primary and secondary education. China has a low primary education completion rate, but it ensures that those who do complete primary education also finish secondary education. The latter is a problem in Cambodia and Laos. In India, as many as 38% of students do not complete primary education and struggle to read or write.

Exhibit 25. Primary education completion rate is highest in Vietnam



Note: The primary completion rate, or gross intake ratio to the last grade of primary education, is the number of new entrants (enrolments minus repeaters) in the last grade of primary education, regardless of age, divided by the population at the entrance age for the last grade of primary education. Data limitations preclude adjusting for students who drop out during the final year of primary education. BD – Bangladesh, CH – mainland China, ID – Indonesia, IN – India, KH – Cambodia, MY – Malaysia, PH – Philippines, TH – Thailand, VN – Vietnam, KR – Korea, LA – Laos. Data as of end-2018 or whichever latest available (2009 in case of China and Bangladesh).
.Source: World Bank, HSBC

11 "Tomorrow's World: A Look at the Demographic and Socio-Economic Structure of the World in 2032", Clint Laurent, 2013

In addition to completion rates or how many kids go to school, what is also important is what one learns at school. It is difficult to come up with a qualitative assessment of education; however, below we look at PISA (Programme for International Student Assessment, run by the OECD) scores across the region.[12]

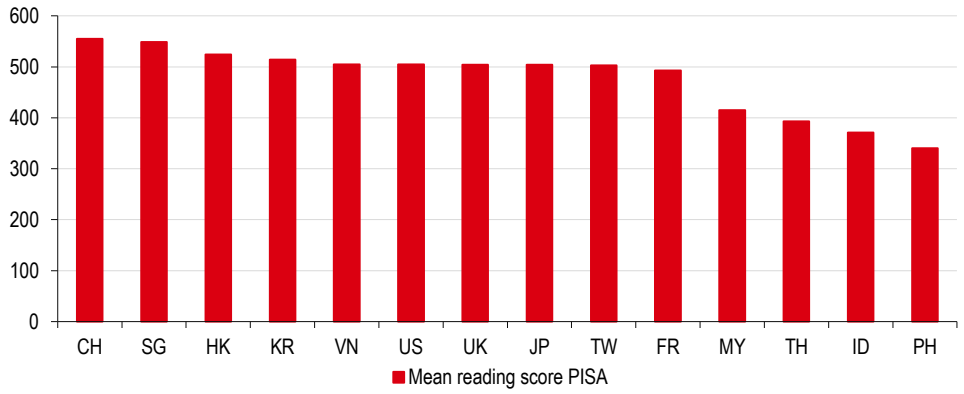
Every three years, 15-year olds around the world are tested on reading and basic arithmetic. This should be a better measurement of the quality of education in these economies. The latest PISA scores for a select group of economies is shown below (not all ASEAN countries participate).

Here, mainland China scores well. Note that Singapore and Hong Kong score substantially better than many other developed economies. Vietnam's PISA score is on par with that of the US. Indonesia lags – the issue here appears to be that while children do go to school and many complete secondary education, it's the quality of education that is an issue. In Thailand, completion rates of secondary education are lower than in Indonesia, but the PISA scores are higher.

The need for more investment in education is important in places like the Philippines, Thailand, Laos, and Cambodia. However, we note that even if these governments were to improve education today, it would take nearly a decade for it to translate into levels similar to those in China today.[13]

> **"Vietnam's PISA score is on par with that of the US.**

Exhibit 26. Vietnam is almost on par with developed economies in terms of education in 2018



Note: CH – mainland China, SG – Singapore, HK – Hong Kong, KR – Korea, VN – Vietnam, US – United States, UK – United Kingdom, JP – Japan, TW – Taiwan, FR – France, MY – Malaysia, TH – Thailand, ID – Indonesia, PH – Philippines. Vietnam's 2018 score of 505 was announced by the Ministry of Education and Training (MOET) but not published in OECD's results. In 2015, Vietnam scored 487 compared to US's score of 497.
Source: PISA 2018 Database, PISA at the OECD.

> **"Indonesia lags – the issue here appears to be that while children do go to school and many complete secondary education, it's the quality of education that is an issue.**

12 For example, education in Indonesia in the 1990s included a large amount of time studying the state ideology (Pancasila), which might have had various benefits but not for, say, working in a factory.
13 "Demographic Trends and Growth in Asia", N. Bierstadt, National Bureau of Asian Research, 2010

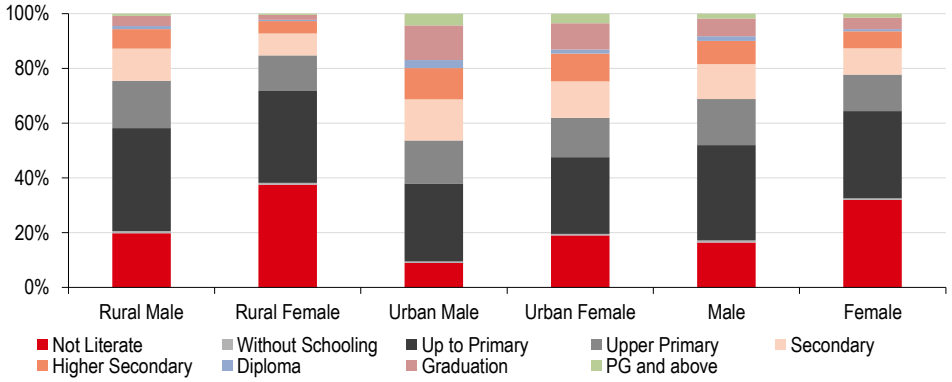
Aside from the quality of education, language is sometimes important too. In India, someone in Karnataka or Tamil Nadu might be well versed in their local language, but this is of little help in Mumbai, where most factories are located and where English or Hindi are spoken. In IT centres such as Bangalore and Hyderabad, English is required.

India has a unique language challenge and many students don't finish primary education

In most economies across Asia local languages are less of an issue than in India. In Indonesia, for example, most will speak a local language (Balinese, Javanese, Sundanese, etc.) but all will be able to speak the official language, Bahasa Indonesia. The same is the case with Mandarin in China.

India is a special case. We have already noted that language is a larger challenge to many and that the percentage of students that do not complete primary education – and, as such, struggle to read or write – is high, at 38%. In addition, in India, there is a wide gap between rural and urban India. The literacy rate in rural India is 71%, while the literacy rate in urban India is 86%. A study shows that in the rural state of Andhra Pradesh only about one in 20 children in fifth grade can perform basic arithmetic.[14]

Exhibit 27. India: Level of education (2014)



Note: Data as of 2014.
Source: MOSPI, HSBC

Tertiary education is also under scrutiny. A study by the Tata Institute of Social Sciences found that the majority of students pursuing higher education in engineering and management are not industry-ready.

This has significant economic implications. A dearth of qualified and skilled labour has emerged as a serious impediment to growth in labour productivity. In addition, it appears to impact the growth of micro- and small-sized manufacturing enterprises. In a study comparing the size of 30 five-year old firms in India, Mexico, and the US with their size at start-up, in India the size had declined by a fourth, in Mexico it had doubled, and in the US the firms were 10 times as large.[15] Other studies show education also impacts agricultural production, which is generally hampered by small and decreasing farm sizes and by the impracticality of applying new technology to increase crop yields.[16]

14 "Rebirth of Education, Schooling Ain't Learning", Lant Pritchett, Center For Global Development, 2013
15 "Assessing Private Sector Contributions to Job Creation and Poverty Reduction", IFC Jobs Study, IFC, January 2013
16 "The Missing Middle: Labor and Economic Growth", Carnegy India, November 16, 2016

Ageing

- Aside from Japan, we see Hong Kong, Taiwan, and Korea in the next decade becoming “super-aged” societies…
- …but life expectancy also continues to rise and the expected length of retirement is longer
- This has implications for consumption and savings patterns

Ageing and living longer

It’s well known that Asia is ageing. This has given rise to the common view that this far-reaching demographic change might have grave social and economic consequences as governments struggle with rapidly rising costs for healthcare. However, we believe these alarmist messages miss the point, something we mentioned at the start of this report, which is that it’s the response to demographic change that’s important, not the demographic shifts. Just like the weather, there is no good or bad weather, it’s the umbrella that you bring along that is important.

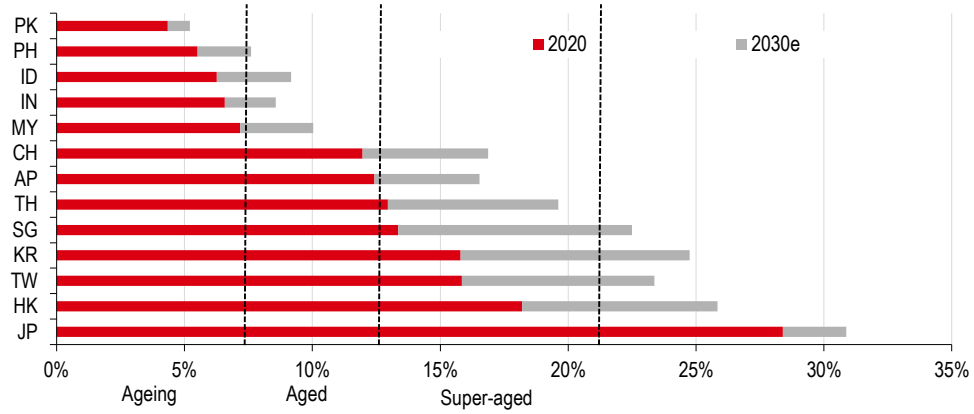
When it comes to ageing, there are wide differences across Asia, and it is north Asia that is ageing rapidly. So, understanding patterns of ageing is important. That is what this chapter is about. The next chapters discuss demographic shifts that are related to this, such as the rise of Chinese ‘empty-nesters’ and the growth in wealth management.

While it is commonly known that Japan has an elderly population, other economies are catching up

Aged and super-aged

A way of measuring age is to compare the proportion of the aged (65 years old or above) in the total population. Japan leads this measure with 28% of the population forming this cohort. According to UN forecasts, Singapore, Hong Kong, Taiwan, and Korea will cross the mark of 20% soon and in the next decade become “super-aged” societies. Ageing is also rapid in Korea and Taiwan. While it took Japan 24 years for its aged population to double from 7% to 14%, in Korea this took just 17 years (2000-17).

Exhibit 28. Asia is super-ageing (an increasing proportion of people aged 65 and above)



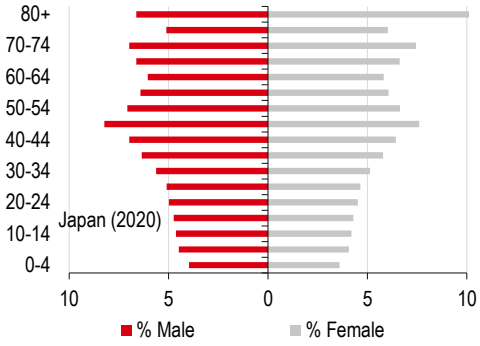
Note: United Nations defines an economy with a % of old population >7% as ageing, >14% as aged, and >20% as super-aged. PK – Pakistan, PH – Philippines, ID – Indonesia, IN – India, MY – Malaysia, CH – mainland China, AP – Asia Pacific, TH – Thailand, SG – Singapore, KR – Korea, TW – Taiwan, HK – Hong Kong, JP – Japan.
Source: World Population Prospects 2019, UN estimates, HSBC

The percentage of the population aged between 0-14 accounts for 12.5% of the total population in Korea whereas the OECD average is 25.4%. Only Japan (12.4%) and Singapore (12.3%) are lower than that of Korea.

> **Hong Kong, Taiwan, and Korea will in the next decade become "super-aged" societies, joining Japan.**

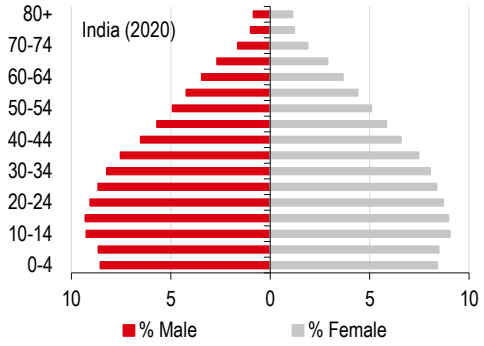
Taiwan and Korea have among the fastest-growing ageing populations in the world, and Japan's median age of 48.4 years (in 2020) is the oldest globally. This is expected to rise to 52.1 years by 2030e. Korea and Taiwan had median ages of 43.7 years and 42.5 years, respectively, in 2020, and this is forecast to exceed 49.1 years and 47.4 years, respectively, by 2030e. In short, while Japan is older, Korea and Taiwan are catching up quickly.

Exhibit 29. Top-heavy Japanese population pyramid in 2020



Source: World Population Prospects 2019, UN estimates, HSBC

Exhibit 30. India: Population pyramid in 2020

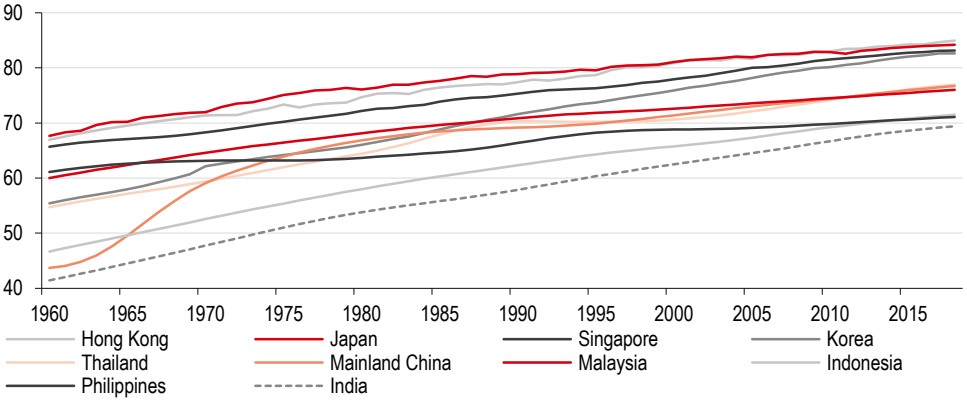


Source: World Population Prospects 2019, UN estimates, HSBC

Living longer

Life expectancy has increased dramatically over the past few decades. Today, people in Hong Kong live the longest (84.9 years), followed by those in Japan (84.2 years), although this is, in Japan, expected to rise to 88.5 years by 2050e with 91.1 years for women.

Exhibit 31. Life expectancy is increasing and is highest in Hong Kong and Japan, and lowest for India and the Philippines



Source: World Bank, HSBC

This impacts the age of the average worker. Singapore with a median age of (42.2 years) is followed by Korea and Taiwan, all currently have the highest working age in Asia. However, this is expected to drop drastically by 2050. However, with a median age of 28.4 years, India has one of the youngest populations and has the world's largest youth population. The working age (15-64 years) segment constitutes 67% of the country's population, which will be the highest in Asia by 2050e.

More elderly workers

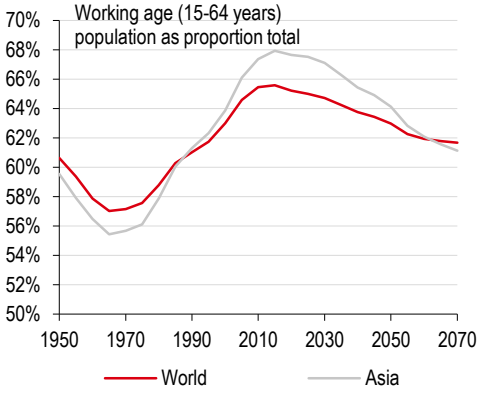
- The average age of the Asian worker is rising, and working longer
- Even in Japan, where the population is falling, the labour market is growing…
- …meaning it doesn't have to be concerned about its ageing population

Who works and who does not

Many widely held assumptions about ageing populations and those who work aren't always correct

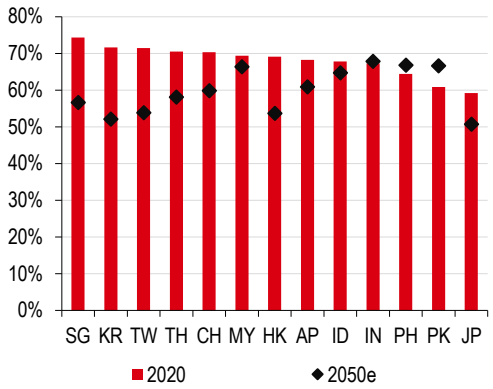
As people live longer, they work longer and this translates into the average worker getting older. To many, this implies that there are fewer young people and more elderly people. However, they also conclude that there are fewer working people that take care of the elderly. The first statement is correct, but the latter is most often incorrect.

Exhibit 32. Working age population shrinking faster in Asia



Source: World Population Prospectus 2019, UN Forecast, HSBC

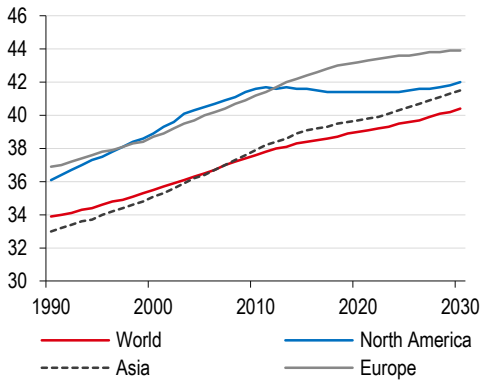
Exhibit 33. Working age cohort is expected to rise in India, the Philippines and Pakistan



Note: MY – Malaysia, IN – India, PK – Pakistan, ID – Indonesia, PH – Philippines, JP – Japan, KR – Korea, TW – Taiwan, TH –Thailand, SG – Singapore, HK – Hong Kong., AP – Asia Pacific, CH – mainland China.
Source: World Population Prospectus 2019, UN Forecast, HSBC

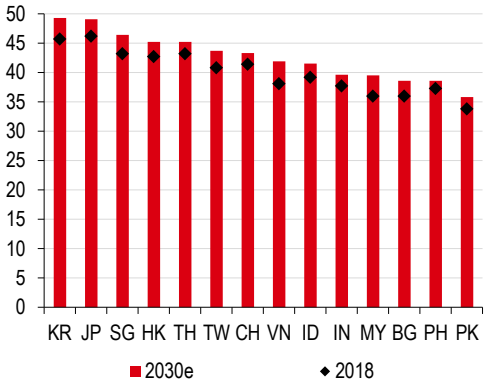
In a younger society, the working age – defined as those between 15-64 years old – is on the rise. We can narrow it down to the middle-aged cohort (aged 40-60) and there most growth is seen in India. This cohort forms 20% of India's total population and this is expected to increase to a quarter in another 10 years. Malaysia, Indonesia, and the Philippines will also see significant increases in those over 40 years old, while in Korea, Singapore, Thailand, and China, this age group is expected to fall or stagnate.

Exhibit 34. Pace of increase in the median age of the labour force fastest in Asia



Source: ILOSTAT estimates, HSBC

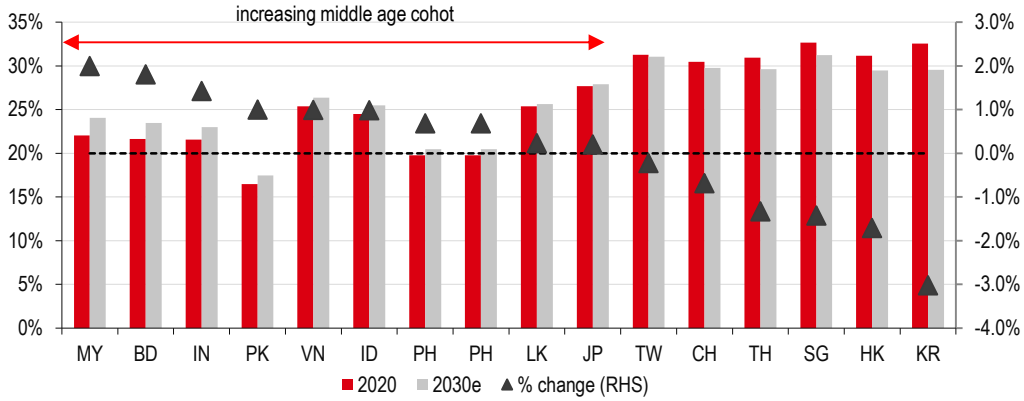
Exhibit 35. Korea, Japan, and Singapore to have the highest median age in Asia



Note: MY – Malaysia, IN – India, PK – Pakistan, ID – Indonesia, PH – Philippines, JP – Japan, KR – Korea, TW – Taiwan, TH – Thailand, SG – Singapore, HK – Hong Kong, BG – Bangladesh, CH – mainland China, VN – Vietnam.
Source: ILOSTAT estimates, HSBC

According to the International Labour Organization (ILO), the median age of the labour force is projected to increase globally, but the pace is expected to be fastest in Asia. Korea and Japan have the highest median age in the world and this is because of a high proportion of workers aged 65-plus in the workforce. In Japan and Korea, people aged 65-plus form 13% and 10% of the total labour force, respectively, while in economies like India, Hong Kong, and mainland China, it is less than 5%.

Exhibit 36. Proportion of 40-60 year olds, out of the total population



Note: MY – Malaysia, BD – Bangladesh, IN – India, PK – Pakistan, VN – Vietnam, ID – Indonesia, PH – Philippines, LK – Sri Lanka, JP – Japan, KR – Korea, TW – Taiwan, TH – Thailand, SG – Singapore, HK – Hong Kong, CH – mainland China.
Source: World Population Prospectus 2019, UN Forecast, HSBC

However, an issue is the definition – we typically assume that on the day people turn 65, most are not productive anymore. That's obviously wrong.

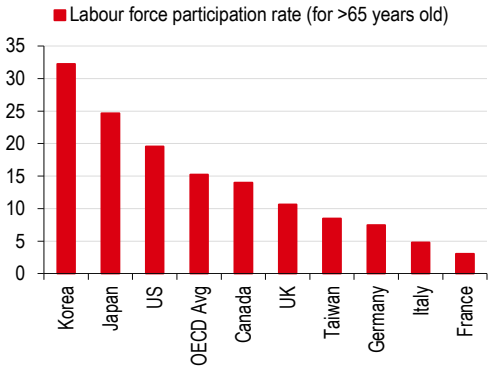
This has a few consequences. People work longer – partially to finance an extended life in retirement. Exhibit 37 shows that, in Korea, more than 32% of the population aged above 65 are still employed, followed only by Japan. Even if we look at the breakdown by gender, 25% of old age (age above 65 years) women in Korea are working and, as such, are financially independent.

> **We typically assume that on the day people turn 65, most are not productive anymore. That's obviously wrong.**

Indeed, in North Asia, it's also about older, well-educated women aged 40 who are entering the work force, often for the first time. Women over 65 years old who are still employed are now a much more common phenomenon in Korea and Japan, and more than in Taiwan, the UK or Europe.

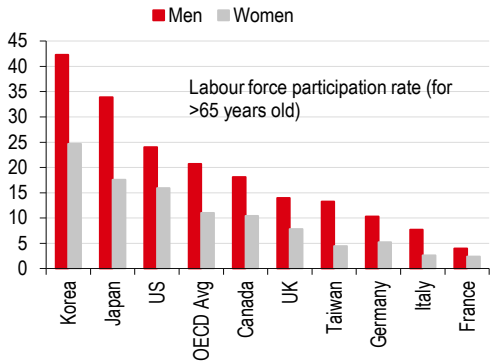
That means that the actual workforce is much larger than the proxy age group (15-64 year olds) that is typically used.

Exhibit 37. Labour force participation rate of people above 65 years (2018)



Note: Data as of end-2018.
Source: OECD, CEIC, HSBC

Exhibit 38. Old age labour force participation by gender (2018)



Note: Data as of end-2018.
Source: OECD, CEIC, HSBC

This changes the dynamics within families and between generations. It enables the older generation to provide for their own pensions and rely less on the younger generation. All this has important implications for how people consume and save. That is something we discuss elsewhere in this report. However, before that, we look at changes in household composition as Asians have fewer children and households get smaller.

> **That means that the actual work force is much larger than the proxy age group (15-64 year olds) that is typically used.**

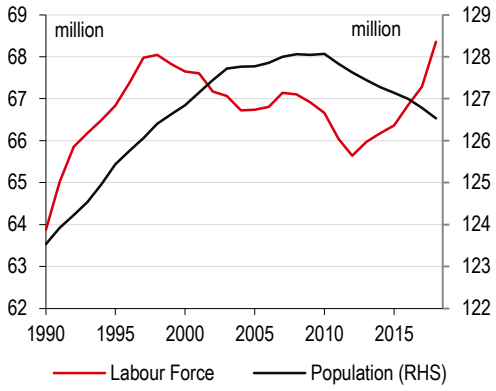
Take a look at Japan. One argument we have heard before is that Japan's population is shrinking (which is true, in fact) and that this implies that there are fewer Japanese working (which is wrong, in fact).

Japan's dependency ratio – the number of people to support per person employed – is improving, not worsening

As people work longer and more women enter the workforce, Exhibit 39 for Japan below shows that Japan's workforce is actually on the rise in the past few years. This is against a backdrop where the overall population fell from 128m in 2008 to 126.5m in 2018. This means that Japan's dependency ratio – the number of people to support, per person employed – is improving, not worsening. In short, Japan need not be overly concerned about its ability to provide for its aged. It's a similar case in Korea, where the population has risen at a CAGR of 0.5% since 2010, while the workforce has risen at a CAGR of 1.4%.

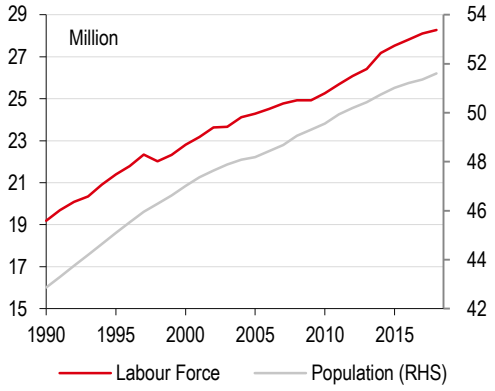
> **Japan need not be overly concerned about its ability to provide for its aged.**

Exhibit 39. Total population in Japan is falling, while the labour force is increasing since 2013



Source: World Bank, HSBC

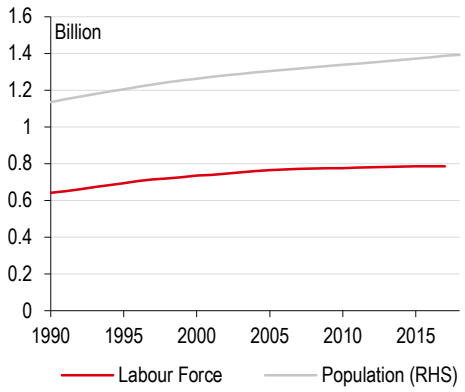
Exhibit 40. In Korea, the labour force is increasing faster than the population



Source: World Bank, HSBC

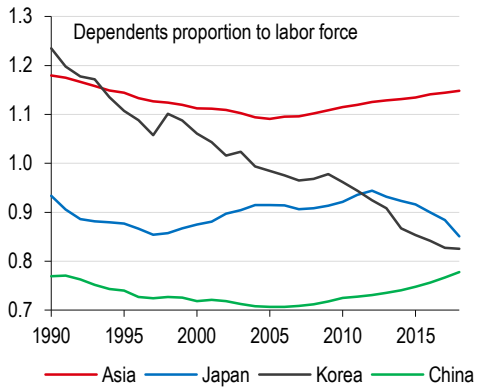
Exhibit 42 shows the proportion of actual dependents to the total population in Asia, Japan, Korea, and mainland China. The population of dependents per worker started increasing in Japan from 1998 and reached its highest point in 2012. Since then, even though the total population has been falling, the increasing number of people in the labour force has led to a drop in the number of dependents. In China, this ratio (though increasing) is much smaller.

Exhibit 41. Mainland China's population is increasing faster than the workforce



Source: World Bank, HSBC

Exhibit 42. In Korea and Japan, the dependency ratio of the workforce is falling



Source: World Bank, HSBC

Women @ work

- Women are increasingly entering the workforce, especially in the Philippines, Indonesia, Korea, and Bangladesh, though not in India
- In 2000-17, c100m women in Asia entered the workforce with many employed in China
- This has important implications for household income and the ability for discretionary spending

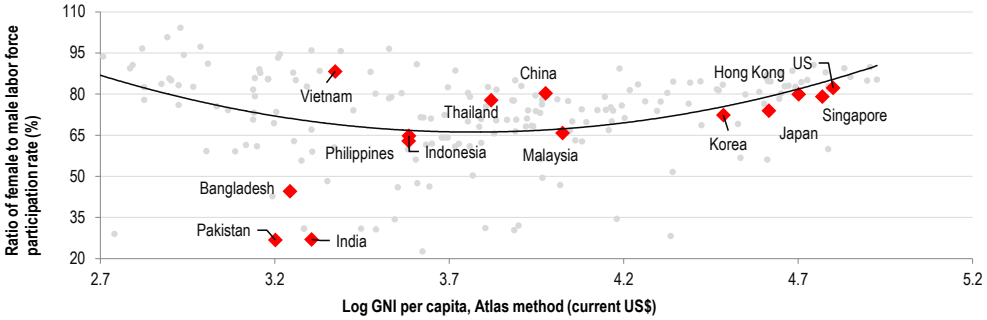
The rise of the female (labour) force

This chapter looks at women who participate in the workforce, generating income for the household, and the broad consequences for consumption and savings behaviour.

Exhibit 43 plots female labour participation rates across the world and highlights a "smiley" curve that links income levels to female labour participation. At lower income levels, female participation generally tends to be high. Women work to ensure that sufficient income is generated for the household.

However, as incomes rise from very low levels, female participation initially tends to fall as women switch from employment to taking care of children. This is the case in, say, Indonesia and the Philippines, for example. However, as income levels continue to rise further, female labour participation starts to rise again, as we see in Korea, Singapore, and Hong Kong.

Exhibit 43. Divergent trends in female labour participation (2019)



Note: Data as of end-2019. China in the chart refers to mainland China.
Source: World Bank, HSBC

Female participation is lower in ASEAN, although still much higher than in India

However, the exhibit also shows that there are large differences in female participation across Asia that cannot be accounted for purely by differences in income levels. Compared with China, female participation is lower in ASEAN, although still much higher than in India. Malaysia's participation rate appears to hit its peak for women aged 25-29 years, after which there is a dramatic fall. This suggests that the majority of women will work upon graduation but leave as

they start families and then rarely return to the workforce[17]. According to Statistics Indonesia, the percentage of women who hold the title of manager increased from 24.2% in 2016 to 30.6% in 2019.

> **Compared with China, female workforce participation is lower in ASEAN, although still higher than in India.**

It might well be that embedded socio-cultural perceptions of women are at the root of these differences across the region. They may also be impacted by the number of children that a household has. The more children there are in a family, the more time is spent on nurturing them and, therefore, there are fewer opportunities for women to work (as the time required for these children often falls disproportionally on the shoulders of women in the household).

Irrespective of the causes, there are divergent trends in the ratio of women working across the region. Interestingly, in most countries more women than men have entered the workforce over the past two years. This is especially the case in the Philippines, Indonesia, Korea, and Bangladesh. The exceptions are India, Thailand, and China where fewer women now enter the workforce than men (or retire earlier), though for the latter two economies it still remains at high levels.

India is an outliner with female participation falling from 35.7% in 1990 to 27% in 2019

Female labour participation actually fell in India from 35.7% in 1990 to 27% in 2019.[18] Interestingly, in most countries more women have entered the workforce. Note that, in China, this ratio has also fallen but that might be because it was high to start with – it decreased from 86.4% in 1990 to 80.4% in 2017.

> **Interestingly, in most countries more women have entered the workforce. This is especially the case in the Philippines, Indonesia, Korea, and Bangladesh.**

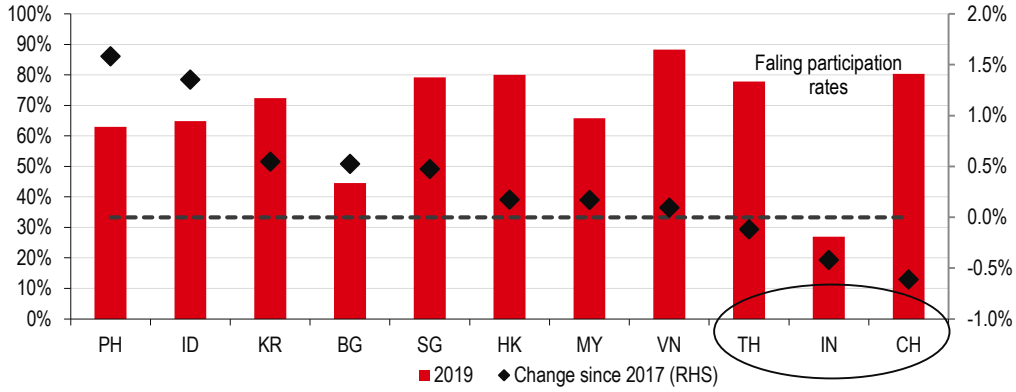
This means that 733m women in Asia are now working (according to the ILO) as of 2017, with 55% coming from East Asia (mainland China, Hong Kong, Japan, Korea, Macau, Magnolia, and Taiwan); this is up from 638m in 2000. Therefore, in the 17-year period, some 100m women have entered the labour force.

100m

Number of women in Asia that found a job in 2000-17

17 "Women in the workforce", Tricia Yeoh, 16 January 2014. From a presentation at the Asia Liberty Forum 2014 in Delhi , India
18 Ratio of female to male labor force participation rate (%) (modeled ILO estimate).

Exhibit 44. Participation rates are improving in ASEAN and Northeast Asia, still high in China but falling in India (%)



Note: MY – Malaysia, IN – India, ID – Indonesia, PH – Philippines, KR – Korea, TH – Thailand, SG – Singapore, HK – Hong Kong, CH – mainland China, VN – Vietnam, BG – Bangladesh.
Source: World Bank, HSBC

This has important implications for household spending. And that is probably best illustrated by the situation in China, where ageing and a high number of women at work is leading to a rise in a group of new spenders – Chinese 'empty-nesters'.

Fewer children, smaller households

- Fertility rates are falling, as are the number of marriages
- This lowers the average size of households, with many 'empty-nesters' in China
- This impacts the nature of savings and spending across Asia

Lower fertility rates and fewer children

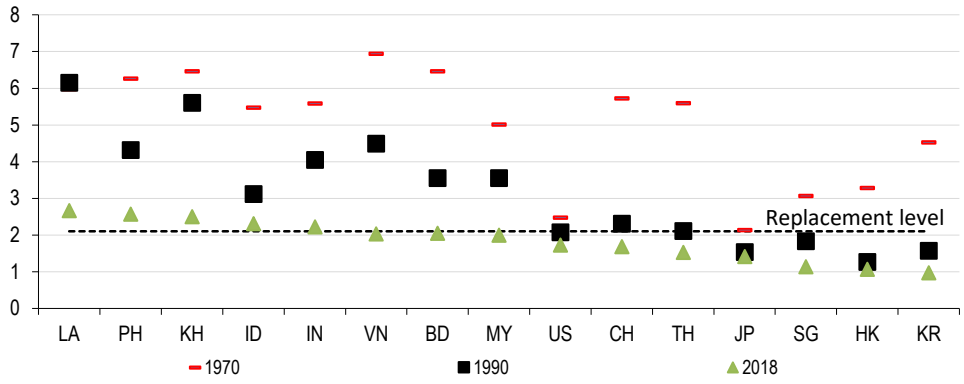
Ageing processes work two ways. On the one hand, people get older, but on the other hand, there are fewer young people. Across Asia, the number of young people is falling because women are having fewer children.

On average, women need to have 2.1 children to keep population numbers constant. This is because two children are needed to replace the parents and the additional 0.1 reflects mortality rates and the fact that, on average, there are just a few more males born than females.

Exhibit 45 plots the fertility rates across the economies in Asia. The chart shows that fertility rates have been declining across economies and has been below the replacement level for a few decades. In fact, the fertility rate recorded 1.1 (vs. world average of 2.4%) in Korea, the lowest among OECD countries.

There are a few reasons for this. Cultural factors might be at play or simple economic issues, such as the increased cost of children's education. However, the issue is that lower fertility rates drives lower population growth across the region.

Exhibit 45 Fertility rates have been falling across economies

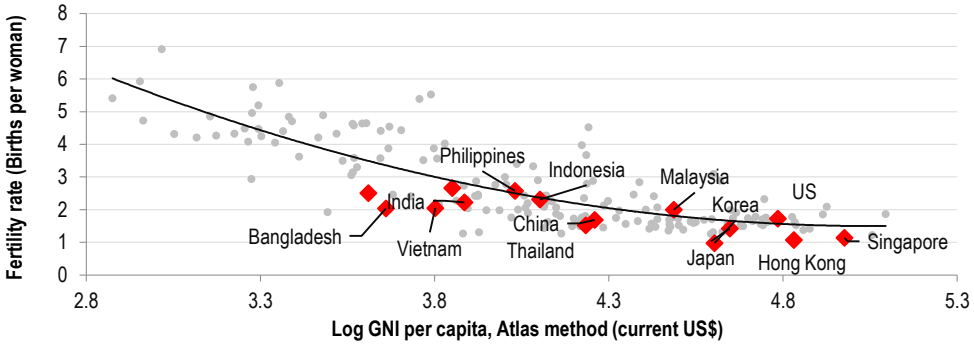


Note: MY – Malaysia, IN – India, ID – Indonesia, PH – Philippines, LA – Laos, KR – Korea, TH – Thailand, SG – Singapore, HK – Hong Kong, CH – mainland China, KH – Cambodia, US – United States, VN – Vietnam, BD – Bangladesh.
Source: World Bank, HSBC.

Exhibit 46 shows that fertility rates and income per capita have an inverse relationship – as incomes rise, women tend to have fewer children. This income-fertility relationship might also work the other way around – with fewer children, women have more time to work and generate income.

> **With fewer children, women have more time to work and generate income.**

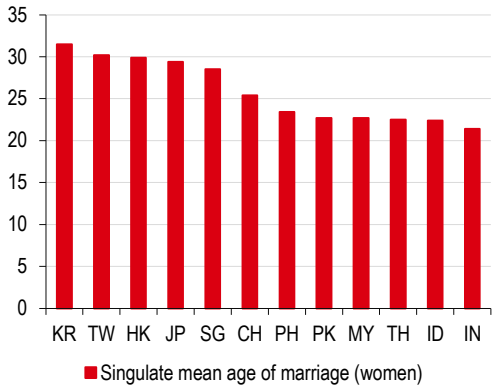
Exhibit 46. Fertility rates fall with income per capita (2018)



Note: Data as of end-2018. China in the chart refers to mainland China.
Source: World Bank, HSBC

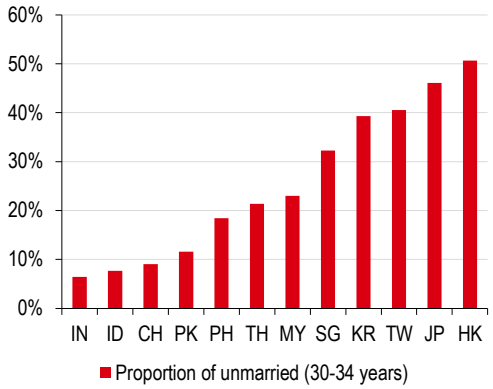
These changes in fertility rates impact household composition, which is a key driver of consumption. Another factor that impacts household consumption is marriage. Exhibit 47 shows that the average age of first marriages is high in affluent economies of Asia – Korea, Taiwan and Hong Kong. It is the highest in Korea, at 31.5 years, followed by Taiwan, at 30.4 years. The average age of marriage has consistently increased over the past decade.

Exhibit 47. Average age of a women for their first marriage: highest in Korea, Taiwan, Hong Kong and Japan (2019)



Note: MY – Malaysia, IN – India, PK – Pakistan, ID – Indonesia, PH – Philippines, JP – Japan, KR – Korea, TW – Taiwan, TH – Thailand, SG – Singapore, HK – Hong Kong, CH – mainland China.
Source: Gender statistics – World Bank, National Sources, UN World Marriage Data 2019, HSBC

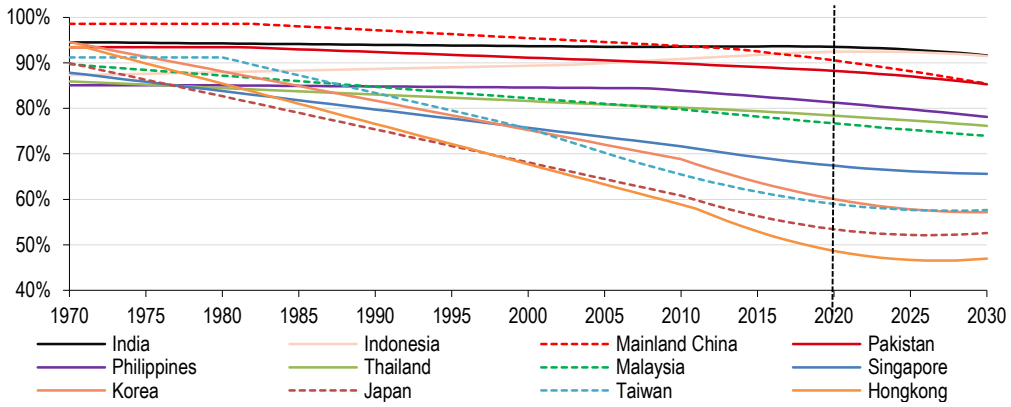
Exhibit 48. Increasing proportion of unmarried women aged 30-34 (2019)



Note: MY – Malaysia, IN – India, PK – Pakistan, ID – Indonesia, PH – Philippines, JP – Japan, KR – Korea, TW – Taiwan , TH – Thailand, SG – Singapore, HK – Hong Kong, CH – mainland China.
Source: United Nations, HSBC

In addition, not only do people marry later, many also do not marry at all. Exhibit 48 shows that in Hong Kong, 51% of the women in the 30-34 age group are unmarried, compared with 40% in Korea, and 18% in the Philippines. In some economies, this would have been over 90% in the 1970s. By comparison, in India, only 6.5% of women in this age bracket were unmarried in 2019, according to UN estimates.

Exhibit 49. Proportion of married women at the age of 30-34 years falling over time



Source: United Nations estimates, Department of Economic and Social Affairs, HSBC

Therefore, the proportion of unmarried women is increasing over time. This also impacts low fertility rates, especially in Northeast Asian countries. In Japan only 2% of children are born to single mothers. In Western Europe, it's different – 55% of births in Sweden take place outside of marriage.

Marriage does not always last. While the marriage rate – the number of people married per 1,000 people – has been falling, the divorce rate has been rising. Korea reported a crude[19] marriage rate of 5.0 in 2018, its lowest ever, down from 9.4 in 1995. Similarly, Japan had a crude marriage rate of 4.7, which is the lowest since the start of data collection on marriages in 1883. Meanwhile, divorce rates have been rising rapidly in recent years. In Asia, the divorce rate has risen from 1.3 in 2000 to 1.9 now, in Hong Kong from 2 to 2.8, while in mainland China it has jumped from 1 to 2.7.

Smaller households

To summarise, Asians now marry late, have fewer children and, in China, they divorce more often than a few years ago. However, there are other demographic changes as well that impact households, such as the tendency to not live with parents as much as in the past.

A sizeable body of literature has examined the evolution of family structures across Asia. One attribute of Asian family life that sets it apart from the rest of the world is the importance of inter-generational living.

The majority of people in Asia, including the elderly, do not live alone. Indeed, 64% of Asians aged over 60 live with children or grandchildren (down from 73% in 1990), compared with 20% in Europe as of 2010. In Asia, independent living is more common in East Asia than in South Central Asia.

19 number of marriages per 1,000 population in an year

64%

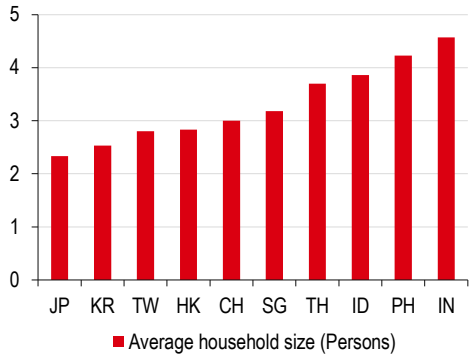
Asians aged over 60 live with children or grandchildren.

In Europe, it's 20%.

This is, however, skewed to countries such as India and Indonesia. In parts of Asia, parents tend to live on their own and not share a home with their children. In economically advanced economies such as Taiwan, Korea, and Japan, there has been a decline in inter-generational households.

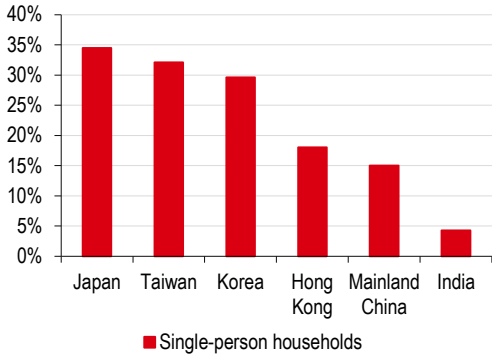
The consequence is that average household sizes are falling – Japan has the lowest average household size in Asia at 2.33, followed by Korea (at 2.53) and Taiwan (at 2.8). A typical Indian household consists of 4.6 persons, while in Indonesia this is substantially lower at 3.9 and in China it is only 3.03 (2.78 in wealthy regions, 3.10 in developing areas, and 3.31 in poorer parts of the country). Thailand closely follows China. China's average household size of 3.03 is because of the government's one-child policy in 1979-2016, and down from 3.2 in 2007 and 3.5 in 2000.

Exhibit 50. Average household size smaller in these economies



Note: IN – India, ID – Indonesia, PH – Philippines, JP – Japan, KR – Korea, TW – Taiwan, TH – Thailand, SG – Singapore, HK – Hong Kong, CH – mainland China.
Source: National Sources, UN Household Size and Composition Around the World 2017, HSBC. Data as of end-2015 or whichever latest available

Exhibit 51. Single-person households high in North Asia



Note: Data as of end-2019 or whichever latest available.
Source: National Sources, HSBC

The falling number of marriages results in an increase in the number of single people. In Northeast Asia, there has been a visible increase in single-person households. About half of all Japanese households now comprise one-to-two people.

In Korea single-person households are estimated to account for 29.6% (and 58.5% if two-person households are included) of total households in 2020e, which is close to one third of all households. This is a significant increase from 23.9% in 2010. Single-person households are estimated to rise to 32.7% (and 65.6% if two-person households are included) by 2030e.

In China, households with one-to-two people accounted for 77.1% of total households in developed regions in 2017. Not surprisingly, both marriage and birth rates are also the lowest in the wealthier regions.

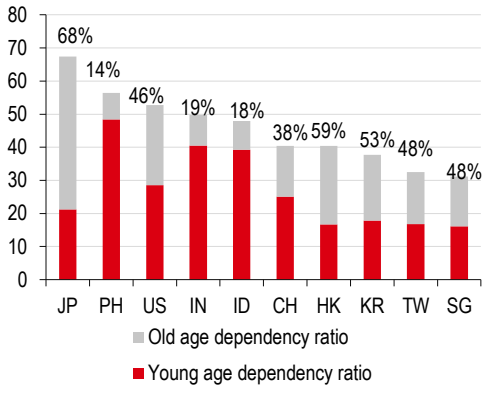
Dependencies

All this brings us to the issue of household dynamics – apart from the number of people in a household, how do households differ and how does this impact consumption and savings? To do this, we examine dependency ratios. This measures the number of employed people in a household relative to the total size of the household. It tells us how many dependants there are for every wage earner to support a household. A high dependency can result from: (1) a high number of children, meaning a youthful population, or (2) a high number of elderly people, an ageing population.

The lower the dependency ratio, the fewer dependants there are and the more a household is able to save or indulge in discretionary spending. The reverse also holds true – the higher the ratio, the less income there is available for either discretionary spending, investing in education or saving for the future.

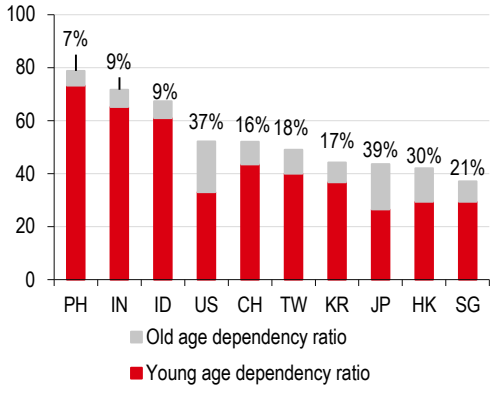
Exhibit 52 shows that Japan has a high dependency ratio, i.e. there are more dependants per working aged person and it consists of a larger portion of elderly that need to be supported. In ASEAN and India, it's the opposite. The Philippines has a high dependency ratio too, but it comes from young dependants. In China, the dependency ratio is substantially lower.[20] This also suggests that the prospects for discretionary consumption and savings will be better for a family in China than in India and the Philippines. Also, since 1990, the dependency rate has fallen in all economies in Asia except in Japan.

Exhibit 52. Dependency ratios are high in Japan, coming mainly from an old age population (2018)



Note: Data as of 2018. The numbers above the bars show what percentage of total dependency comes from an old age population. IN – India, ID – Indonesia, PH – Philippines, JP – Japan, KR – Korea, TW – Taiwan, TH – Thailand, SG – Singapore, HK – Hong Kong, CH – mainland China.
Source: World Bank, HSBC

Exhibit 53. Ratios have fallen for all economies in Asia except for Japan (1990)



Note: Data as of 1990. The numbers above the bars show what percentage of total dependency comes from an old age population.IN – India, ID – Indonesia, PH – Philippines, JP – Japan, KR – Korea, TW – Taiwan, TH – Thailand, SG – Singapore, HK – Hong Kong, CH – mainland China.
Source: World Bank, HSBC

A key issue with the charts above is that it calculates dependency assuming the working age population to be wage earners. However, this is generally not the case. A high proportion of people in the working aged population (think of women) don't actually work. This separates India from ASEAN and China, where women participation in the workforce is higher.

20 In India, the average worker (or better said, those of working age) supports 0.5 other people (excluding themselves). Breaking these into age-specific dependants into those below 15 years and those above 64 years – a typical working Indian supports 0.40 children and 0.09 elderly people. This ratio of elderly dependency has actually increased from 0.05 in the 1960s as India's mortality rate has fallen and life expectancy has increased. Compared with other countries, Indonesia's numbers are comparable with the working age individual supporting 0.40 children and 0.08 elderly people. In China, it is 0.2 Children and 0.15 elderly people. In fact, India has one of the highest young age dependency ratios in Asia after the Philippines.

Chinese ‘empty-nesters’

- Ageing, a high proportion of female labour participation, and small households are key trends in China
- This leads to the rise of Chinese ‘empty-nesters,’ also known as the ‘dual income, no kids’ (DINKs) phenomenon
- This is one of the largest and fastest rising consumer markets globally

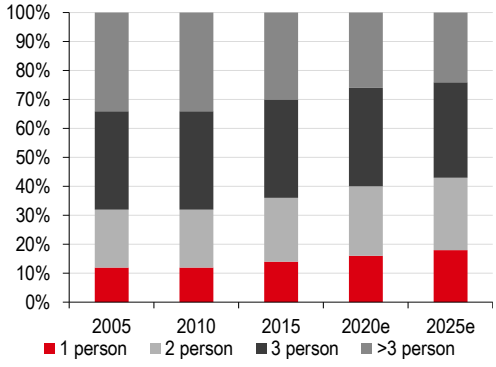
Chinese ‘empty-nesters’

China offers a fascinating demographic story, with several decades of rapid development, internal migration, and a one-child policy. There are three key points:

1. Chinese households are smaller than elsewhere across the region, the result of the one-child policy in 1979-2016.
2. Female labour participation rates have been high, which means that there are many dual-income households.
3. An ageing working population has given rise to an affluent middle-aged segment of society.

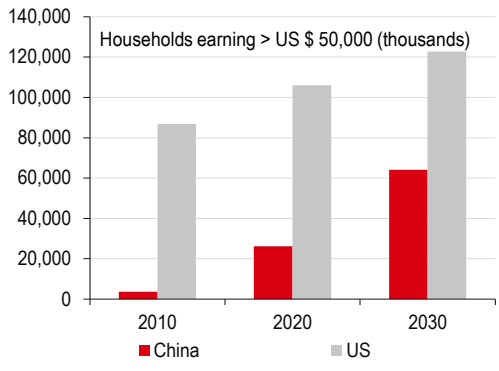
All this lifts the number of Chinese ‘empty-nesters’ or DINKs – “dual income, no kids” – households in China. Some demographers believe that this is the largest, fastest-growing consumer market globally. To put some numbers to this, Chinese households with earnings of more than USD20,000 per year are projected to grow from 160m in 2020 to 266m in a decade, according to Global Demographics, a consultancy firm. The number of Chinese households earning more than USD50,000 per year is expected to be over 64m by 2030e, growing by a CAGR of 15.5% since 2010. This is compared to expected growth of just 1.7% in the US.

Exhibit 54. As children move out, the number of households with 1-2 people are increasing



Source: Global Demographics estimates, HSBC

Exhibit 55. Households earning more than USD50,000/year to grow by a CAGR of 15.5%



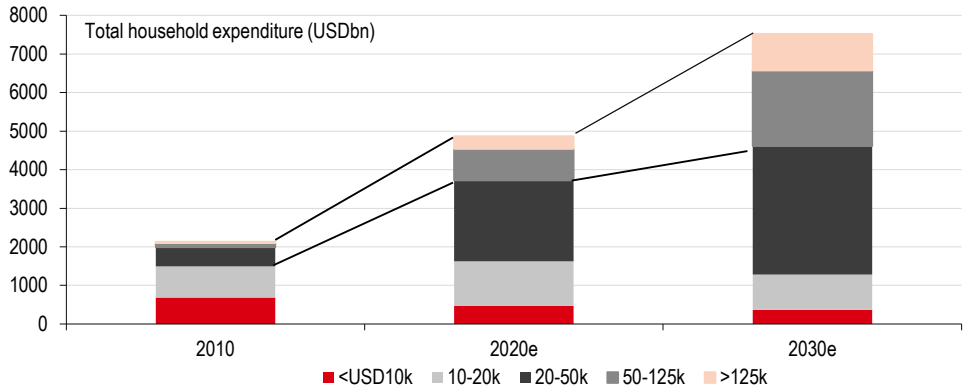
Source: Global Demographics estimates, HSBC

Global Demographics also estimates that 44% of the adult population in urban China are 40-60 years old and account for 53% of urban consumer spending. This segment of consumers has children in their late teens or older and who have typically moved out, turning the three-member household into a two-member household, known as "working age 'empty-nesters'. This 'empty-nester' cohort is likely to form 46% of the adult urban population by 2028e and be responsible for 55% of total spending.

> **"This 'empty-nester' cohort is likely to form 46% of the adult urban population by 2028e and be responsible for 55% of total spending.**

Exhibit 56 represent total annual expenditure of all households that belong to each income category. It shows that it is the higher income level groups (with annual income of more than USD50,000) that are likely to be the key driver of overall consumer spending in China over the coming decade. This group's influence as a consumer market should grow in the coming years.

Exhibit 56. China's consumer spending is increasing, especially in high income households



Note: The bars represent total annual expenditure of all households that belong to each annual income category.
Source: Global Demographics estimates, HSBC

This rise of these 'empty-nesters' along with lower fertility rates, ageing, and more women at work all impact the way Asians shop, save, and live. Investable themes sprout from these trends, which we discuss elsewhere in this report.

Notes

Disclosure appendix

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Upside/Downside is the percentage difference between the target price and the share price.

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